TEMPERATURE, SALINITY AND DENSITY ATLAS FOR STATION 27

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ABSTRACT

C. Fitzpatrick and E. B. Colbourne. 2000. Temperature, salinity and density atlas for Station 27. Can. Data Rep.of Hydrogr. Ocean Sci. No. 154: v + 99 p.

Monthly means of temperature, salinity and density for the Station 27 (Latitude 47° 32.8' N, 52° 35.2' W) oceanographic data set are presented. The time series from 1946 to 2000 is available at standard water depths of near surface, 10, 20, 30, 50, 75, 100, 125, 150-m and near bottom at 176-m. Monthly anomalies of temperature, salinity and density are also presented, based on the reference period of 1961-1990. In addition, monthly statistical summaries for each water depth over the complete time period, which includes monthly means, standard deviations, standard errors and minimum and maximum values are also included.

RÉSUMÉ

C. Fitzpatrick and E. B. Colbourne. 2000. Temperature, salinity and density atlas for Station 27. Can. Data Rep.of Hydrogr. Ocean Sci. No. 154: v + 99 p.

Les moyennes mensuelles de température, de salinité et de densité pour l'ensemble de données océanographiques de la station 27 (latitude 47° 32,8' N, 52° 35,2' O) sont présentées dans le présent rapport. La série chronologique de 1946 à 2000 est illustrée aux profondeurs standard suivantes : près de la surface, 10 m, 20 m, 30 m, 50 m, 75 m, 100 m, 125 m, 150 m et près du fond à 176 m. Les anomalies mensuelles en matière de température, de salinité et de densité sont aussi présentées, avec comme la période de référence 1961 à 1990. Le rapport comprend aussi pour chaque profondeur des sommaires statistiques mensuels qui couvrent toute la période visée, et qui incluent les moyennes mensuelles, les écarts standard, les erreurs standard et les valeurs minimales et maximales.

INTRODUCTION

Historically, Station 27 (Latitude 47° 32.8' N, 52° 35.2' W) was the first hydrographic monitoring station in the standard St. John's to Flemish Cap transect established in 1946. It is located about 8 km off St. John's harbour Newfoundland (Fig. 1), in a water depth of 176 m. This station is located in the Avalon Channel where cold sub-zero °C water that forms the cold-intermediate-layer (CIL) on the continental shelf is present year around in water depths from about 100 m to the bottom at 175 m. In recent years the station has been occupied on a regular basis primarily by oceanographic and fisheries research vessels at a frequency of about 2-4 times per month on average. Thus the Station 27 oceanographic data set is one of the most widely used time series in the Northwest Atlantic for providing indices of ocean climate change and physical environmental influences on various aspects of the fisheries.

Previous reviews of the Station 27 data set include a study by Huyer and Verney (1975) in which temperature, salinity and density data from 1950 to 1959 were presented. Keeley (1981) extended the review from 1946 to 1977. Additional studies using the Station 27 database have included extensive analysis of temperature and salinity variability along the east and northeast Newfoundland Shelf (Bailey, 1961, Petrie et al. 1988, Petrie et al. 1991, Petrie et al. 1992, Templeman, 1975). Drinkwater and Trites (1986) have compiled monthly averaged temperature and salinity values for standard areas over the entire Grand Bank and most of the northeast Newfoundland Shelf up to 1982. More recently, Colbourne and Fitzpatrick (1994) presented an analysis of the Station 27 data set for the years 1978 to 1993. This data report provides an update of the time series and also provides the data in a format suitable for general use.

DATA

The data contained in this report were compiled and archived at the Northwest Atlantic Fisheries Center (NAFC) in St. John's Newfoundland, Canada. The data is also available from the Marine Environmental Data Service (MEDS) in Ottawa, Canada. Most of the data were collected at standard nominal depths of 0,10,20,30,50,75,100,125,150, and 175 m using water-sampling bottles fitted with reversing thermometers. Since the 1960s and up to the present a considerable amount of data were also collected using mechanical and electronic bathythermographs and since the late 1970s conductivity-temperature-depth (CTD) recorders have been used extensively. The expected accuracy's of these data range from ± 0.2 °C in temperature for bathythermographs to ± 0.02 for reversing thermometers and ± 0.005 °C for CTDs. Salinities are accurate to within ± 0.02 from bottle titrations to ±0.005 from CTD measurements. Densities are reported as sigma-t values. These were calculated using the UNESCO equation of state for seawater (Millero, et al. 1980).

The distribution of temperature and salinity data collected among years and by season was reviewed by Colbourne and Fitzpatrick (1994) for the years 1946 to 1993. Tables 1 and 2 present an updated analysis for the years 1946 to 1999. The entries in these tables indicate the number of station occupations when temperature and salinity measurements were made at a minimum of one standard depth. The number of temperature (salinity) profiles collected from 1946 to 1979 accounted for about 40% (46%) of the data. Since 1980 there has been a large increase in data collection with an average of 45 to 50 profiles per year. The 1980s accounted for 24% (22%) and the 1990s accounted for 36% (32%) of the data. The seasonal distribution shows a bias towards maximum station occupation in spring and early summer to a minimum in the winter months but otherwise reasonably well sampled. The number of temperature (salinity) profiles collected during the winter (January, February and March) accounted for 18% (17%) in the spring (April, May and June), 32% (32%) in the summer (July, August and September) 24% (26%) and in the fall (October, November and December) 26% (25%).

DATA ANALYSIS

The Station 27 data were quality controlled for obvious spikes and range restricted. The profiles were not extrapolated beyond their depth range but were interpolated onto standard depths. Data for each day of the month were computed by linear interpolation between actual observations during the month. For months in which no data were available either at the beginning or the end of the month, data from the preceding or following month were used in the interpolation. Monthly mean temperature, salinity and sigma-t values were then computed by summing all data over each day of the month. Some temporal biasing in the calculation of monthly averages are likely given the variations in the amount of data collected from year to year and when the data for a particular month are not distributed evenly throughout the month. Also some months have only one measurement while others have several.

To calculate anomalies the data for all years were first sorted by day-of-the-year to determine the seasonal cycle. Following the general methods of Akenhead (1987) and Myers et al. (1990) the seasonal cycles of temperature, salinity and density at selected water depths were determined by fitting least-squares regressions to the data. The fitted values were the mean and 4 sine and cosine pairs representing 4 harmonics (*1*, *1/2*, *1/3* and *1/4* years). The amplitude of the seasonal cycle was then computed by summing the mean and the 4 sine and cosine terms of the form $c_i cos(\omega t)$ and $s_i sin(\omega t)$, where ω is the frequency $(2\pi/T)$, T is the period of the i^{th} harmonic, t is the day of the year and c_i and s_i are the least-squares fitted coefficients. The amplitude and phase of each harmonic are given by $(c_i^2+s_i^2)^{1/2}$ and $\tan^{-1}(s_i/c_i)$ respectively. Colbourne and Fitzpatrick (1994) provided tables of regression coefficients, the mean and the amplitude and phase for each harmonic based on all data from 1946 to 1993 at standard oceanographic depths. The anomalies were then calculated by subtracting the amplitude of the least squares fitted value of the seasonal cycle for the same day of the year from each observation. Summary statistics by month of the entire time series were computed using a standard statistical package (SAS 1993).

DATA PRODUCTS

Appendix A-1 contains monthly averages of temperature by year for each standard depth. Months for which no data were available are left blank. The yearly average is simply the average over the months in which there were data available. Therefore, these values should be used with caution. Appendix A-2 contains the overall monthly statistical summaries for temperature at each standard depth and Appendix A-3 contains monthly average temperature anomalies by year. Similarly, Appendixes B and C contains salinity and sigma-t monthly and summary statistical information.

The data presented in this report are currently available on the Department of Fisheries and Oceans (DFO) World Wide Web sites, either via the DFO nation site (**http://www.dfo-mpo.gc.ca**) through regional links or from the DFO oceanography site at the Northwest Atlantic Fisheries Center (NAFC) St. John's Newfoundland at URL: **http://oceanography.nwafc.nf.ca:81/datasets/stn27**. The tables contained in the report are available in Microsoft Excel spreadsheet files at standard depths. Additional information may be obtained from the authors at email addresses:`fitzpatrickc@dfo-mpo.gc.ca`. or `colbourn@dfo-mpo.gc.ca`.

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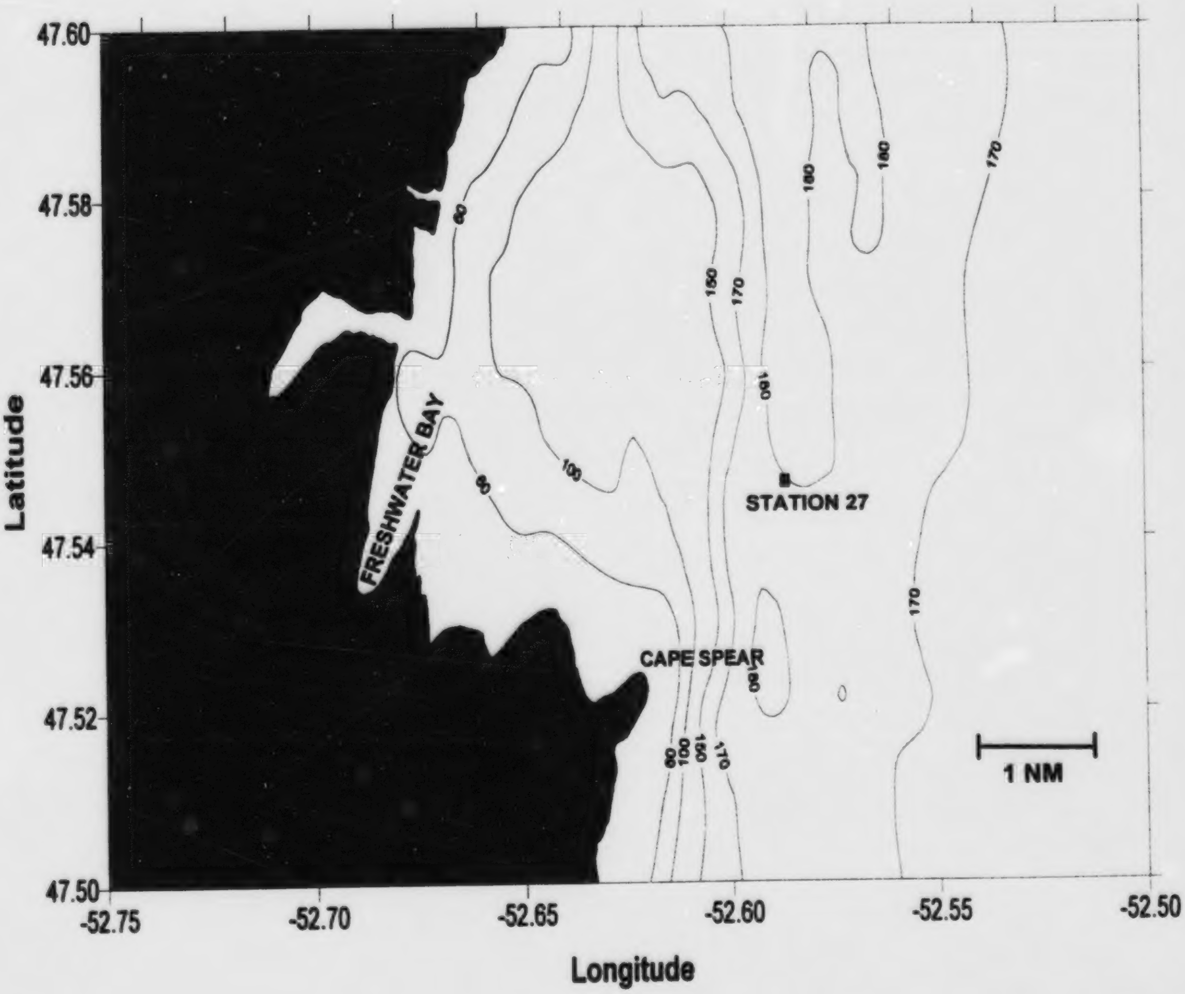
47.60
47.58
47.56
47.54
47.52
47.50
Latitude
-52.75
-52.70
-52.65
-52.60
-52.55
-52.50
Longitude
FRESHWATER BAY
STATION 27
CAPE SPEAR
1 NM
80
100
150
160
170
180

Fig. 1. Location map showing the position of Station 27.

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1946	0	0	0	0	0	1	2	2	3	2	3	1	14
1947	0	0	1	0	1	1	2	0	1	2	1	0	9
1948	0	0	1	1	1	1	1	1	0	0	0	0	6
1949	0	0	0	0	0	1	1	1	2	1	0	1	7
1950	1	0	1	2	0	1	2	1	2	0	1	1	12
1951	1	1	1	1	1	2	1	1	1	1	0	0	11
1952	1	0	0	2	2	2	1	2	1	2	0	1	14
1953	0	1	0	1	2	1	2	2	1	2	2	1	15
1954	1	2	1	1	2	2	2	1	1	2	1	1	17
1955	1	1	0	1	1	2	1	2	2	1	2	1	15
1956	1	1	2	1	1	1	2	3	1	2	1	1	17
1957	1	1	1	2	1	2	2	1	1	1	2	2	17
1958	1	1	1	2	2	2	2	1	1	1	3	1	18
1959	1	1	1	2	1	1	2	2	1	3	3	1	19
1960	1	1	1	1	3	3	3	2	3	2	1	1	22
1961	2	2	3	0	1	2	4	2	4	1	3	0	24
1962	1	1	1	1	3	2	2	2	1	4	2	0	20
1963	2	1	1	3	1	3	2	1	2	3	2	2	23
1964	1	1	1	4	3	2	3	3	3	2	3	1	27
1965	2	2	2	1	3	3	3	3	1	2	3	1	26
1966	0	1	3	3	3	2	2	2	2	2	1	2	23
1967	2	2	2	1	3	2	1	3	2	2	2	2	24
1968	3	3	2	3	2	3	3	2	3	2	3	1	30
1969	1	1	3	1	3	2	2	1	1	3	2	1	21
1970	1	3	3	3	2	3	2	2	0	2	3	1	25
1971	1	2	2	2	3	3	1	2	1	1	1	2	21
1972	1	2	3	2	2	1	3	2	1	2	2	0	21
1973	1	2	2	2	1	3	2	1	2	2	2	1	21
1974	1	1	2	2	2	3	1	2	1	3	2	0	20
1975	2	1	0	2	1	2	2	1	1	3	2	1	18
1976	1	2	1	2	4	2	2	1	2	2	1	1	21
1977	2	3	1	3	3	3	2	1	2	2	2	2	26
1978	3	2	1	2	3	2	1	1	1	1	1	0	18
1979	1	2	2	1	2	3	3	2	3	3	3	2	27
1980	1	0	2	5	3	1	3	1	2	1	2	2	23
1981	2	0	2	5	4	4	2	0	3	1	3	2	28
1982	3	2	3	5	4	2	3	0	4	2	1	0	29
1983	0	1	0	1	2	1	4	1	2	5	4	6	27
1984	2	2	0	2	4	2	4	5	4	2	5	6	38
1985	4	5	5	5	8	3	4	4	3	6	5	1	53
1986	3	13	4	2	5	5	4	3	3	2	6	2	52
1987	1	2	1	4	6	7	4	6	2	5	6	2	46
1988	1	1	0	3	7	5	4	6	3	6	3	2	41
1989	1	2	0	4	12	5	4	3	3	4	6	2	46
1990	3	4	3	1	10	4	5	4	3	4	1	4	46
1991	0	7	3	10	8	8	6	6	2	8	6	8	72
1992	1	5	1	6	17	9	6	1	4	5	12	12	79
1993	6	6	5	5	8	11	3	4	6	4	6	5	69
1994	11	4	3	3	6	6	8	4	4	4	5	6	64
1995	2	3	1	6	11	9	5	3	4	6	3	4	57
1996	5	3	3	5	8	5	5	2	7	4	6	5	58
1997	5	0	0	3	8	5	8	4	4	2	3	5	47
1998	2	0	3	6	6	10	3	3	4	5	6	4	52
1999	2	0	2	1	8	6	2	3	4	4	7	3	42
TOTAL	93	104	87	137	208	177	154	119	125	144	156	114	1618

Table 1. The number of monthly temperature profiles available at Station 27 by year.

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1946	0	0	0	0	0	1	2	2	3	2	3	1	14
1947	0	0	1	0	1	1	2	0	1	2	1	0	9
1948	0	0	1	1	1	1	1	1	0	0	0	0	6
1949	0	0	0	0	0	1	0	1	2	0	0	1	5
1950	0	0	1	2	0	1	2	1	2	0	1	1	11
1951	1	1	1	1	1	2	1	1	1	1	0	0	11
1952	1	0	0	2	2	2	1	2	1	2	0	1	14
1953	0	1	0	1	2	1	2	2	1	2	2	1	15
1954	1	2	1	1	2	2	2	1	1	2	1	1	17
1955	1	1	0	1	1	2	1	2	2	1	2	1	15
1956	1	1	2	1	1	1	2	3	1	2	1	1	17
1957	1	1	1	1	1	2	2	1	1	1	2	2	16
1958	1	1	1	2	2	2	2	1	1	1	3	1	18
1959	1	1	1	2	1	1	2	2	1	3	3	1	19
1960	1	1	1	1	3	3	3	2	3	2	1	1	22
1961	2	2	3	0	1	2	4	2	4	1	3	0	24
1962	1	1	1	0	3	2	2	2	1	4	2	0	19
1963	2	1	1	3	1	3	2	1	2	3	2	2	23
1964	1	1	1	4	3	2	2	3	3	2	3	1	26
1965	2	2	2	1	3	3	3	3	1	2	3	1	26
1966	0	1	3	3	3	2	2	2	2	2	1	2	23
1967	2	2	2	1	3	2	1	3	2	2	2	2	24
1968	3	3	2	3	2	3	3	2	3	2	3	1	30
1969	1	1	3	1	3	2	2	1	1	3	2	1	21
1970	1	3	3	3	2	3	2	2	0	2	3	1	25
1971	1	2	2	2	3	3	1	2	1	1	1	2	21
1972	1	2	3	2	2	1	3	2	1	2	2	0	21
1973	1	2	2	2	1	3	2	1	2	2	2	1	21
1974	1	1	2	2	2	3	1	2	1	3	2	0	20
1975	2	1	0	0	1	2	2	1	1	3	2	1	16
1976	1	2	1	2	4	2	2	1	2	2	1	1	21
1977	2	3	1	3	3	3	1	1	2	2	2	2	25
1978	3	2	1	2	3	2	1	1	1	1	1	0	18
1979	1	2	2	1	2	3	3	2	3	3	3	2	27
1980	1	0	2	5	2	1	3	1	1	0	0	0	16
1981	2	0	2	4	3	4	2	0	3	1	3	2	26
1982	3	2	3	5	4	2	3	0	4	2	1	0	29
1983	0	1	0	1	1	1	4	1	2	5	4	6	26
1984	2	2	0	2	4	2	3	5	4	2	5	6	37
1985	4	3	4	5	7	3	4	4	3	4	4	0	45
1986	3	9	3	2	4	4	3	3	1	1	3	1	37
1987	1	2	0	3	6	5	2	5	2	3	2	1	32
1988	0	1	0	2	6	5	4	6	2	5	2	2	35
1989	1	2	0	3	5	3	3	3	2	3	6	2	33
1990	2	2	1	1	6	4	5	4	3	4	0	3	35
1991	0	3	2	4	5	7	5	4	2	7	5	6	50
1992	1	4	1	6	12	7	3	1	3	4	2	7	51
1993	1	3	1	4	5	6	2	4	5	3	4	1	39
1994	5	1	0	3	6	5	6	4	3	3	5	6	47
1995	0	3	0	4	10	8	4	3	4	6	3	4	49
1996	5	3	3	4	8	4	5	2	6	4	6	4	54
1997	5	0	0	3	7	4	8	4	4	2	2	3	42
1998	2	0	3	5	5	10	3	3	4	5	5	3	48
1999	2	0	2	1	8	6	2	3	3	4	6	3	40
TOTAL	77	85	73	118	177	160	138	116	115	131	128	93	1411

Table 2. The number of monthly salinity profiles available at Station 27 by year.

Appendix A-1. Monthly averages of temperature by year at standard depths.

MONTHLY AVERAGE SURFACE TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						7.03	8.61	14.09	13.49	9.11	4.46	1.90	8.38
1947			-1.20		0.69	4.38	10.48		11.32	8.17			5.64
1948				-0.50	1.56	6.83	8.95						4.21
1949						7.10		12.49	11.11			2.41	8.28
1950			-1.35	-0.08		5.27	9.02	12.06	11.60		4.60	3.49	5.58
1951	0.12	-0.58	-0.19	1.17	3.06	7.10	11.17	11.28	11.39	9.59			5.41
1952	0.02			0.60	2.97	6.34	10.03	14.67	11.88	9.35		2.46	6.48
1953		0.04		0.64	2.32		10.72	11.71	11.56	9.17	5.60	2.30	6.01
1954	-0.29	-1.05	-0.40	-0.56	0.69	4.46	9.81	11.79	10.54	7.89	4.59	2.42	4.16
1955	1.00	-0.02		-1.01	-0.20	3.48	8.32	11.10	10.45	6.93	4.96	2.20	4.29
1956	1.13	0.04	-0.55	-0.33	1.25	4.88	9.22	11.75	10.97	8.18	5.80	2.78	4.59
1957	-0.38	-1.65	-1.63	-1.04	0.13	3.39	10.00	10.81		7.69	5.44	1.75	3.14
1958	0.56	0.15	0.02	1.10	2.86	5.94	10.38	11.96	11.35	8.21	4.95	1.49	4.91
1959	-0.35	-1.38	-1.62	-0.85	1.25	3.74	8.63	13.32	11.88	8.48	5.10	2.30	4.21
1960	0.01		-0.59	-0.15	1.58	6.36	9.95	13.45	12.95	8.93	5.33	1.87	5.43
1961	-0.06		-1.43		0.81	5.36	10.70	14.18	11.73	11.20	7.26		6.64
1962	1.08	-0.60	-1.07		2.14	4.28	9.15	11.94	10.72	9.22	6.13		5.30
1963	0.91	-0.32	-1.06	-0.53	1.39	4.97	10.37	12.47	11.01	8.53	5.89	1.70	4.61
1964	-0.01	-1.12	-1.44	-0.54	0.44	5.61	8.40	11.16	11.17	8.49	4.82	2.55	4.13
1965		-1.25	-1.12	0.09	1.18	5.01	9.19	11.84	11.88	8.63	5.04	2.75	4.84
1966		-0.30	-0.36	0.22	1.85	6.06	9.57	11.65	10.80	8.25	5.33	3.15	5.11
1967	1.16	-0.72	-1.39	-1.35	0.03	4.63	11.02	15.53	13.30	10.91	7.57	3.43	5.34
1968	1.02	0.25	-0.39	0.27	1.67	4.16	8.53	11.02	10.76	8.63	5.65	2.78	4.53
1969	0.59	-0.08	0.22	0.58	2.26	5.85	8.40	11.19	11.59	8.28	5.39	3.83	4.84
1970	1.04	0.04	0.17	0.37	3.15	6.01	11.53	13.89		8.91	6.66	2.45	4.93
1971	-0.48	-1.01	-0.59	0.88	3.26	7.41	10.98	13.98	11.82	8.55	5.02	2.08	5.16
1972	-0.23	-1.41	-1.21	-0.81	1.49	5.06	9.26	11.03	10.07	8.63	4.77		4.24
1973	-1.64	-1.48	-1.40	-0.88	0.41	4.70	10.47	12.03	11.89	9.33	5.36	2.75	4.30
1974	0.07	-1.19	-1.03	-0.17	1.38	3.30	7.45	11.17	12.28	8.86	4.84		4.27
1975	-0.72				1.02	3.04	10.29	13.23	11.82	8.21	4.55	2.27	5.97
1976		-0.83	-0.93	0.13	2.93	5.18	9.50		12.33	8.28	3.46	1.58	4.16
1977	-0.21	-1.47	-1.24	-0.03	2.61	6.17	9.10	10.99	10.82	8.43	5.56	1.76	4.37
1978	0.20	-0.50		-0.21	2.51	3.95	9.38		10.26	7.85	3.93		4.15
1979	0.52	-0.46	-0.81	0.13	1.62	6.73	11.12	14.39	12.29	9.05	5.43	2.26	5.19
1980	0.13		-1.36	0.01	2.21	5.73	9.20	11.75	10.18	8.19	4.03	2.29	4.76
1981	-0.25		-0.05	0.13	3.69	6.90	11.04		12.21	8.81	5.72	3.38	5.16
1982	0.83	-0.92	-1.33	-0.33	2.30	5.55	9.13		12.37	9.12	6.05		4.28
1983		-0.80		1.56	2.56	5.91	10.85	12.14	12.25	10.00	6.07	2.49	6.30
1984	-0.13	-1.27		-0.73	-0.08	3.65	10.42	13.84	12.39	8.99	4.70	1.96	4.89
1985	-1.00	-1.59	-1.65	-0.73	0.61	4.53	9.94	11.65	11.58	9.01	4.40	0.95	3.98
1986	-0.44	-1.47	-1.62	-0.31	2.40	5.86	9.97	13.27	11.63	8.00	4.83	1.39	4.46
1987	-0.53	-1.62	-1.66	-1.27	1.87	6.16	10.94	13.65	11.06	9.43	5.66	1.76	4.62
1988	0.03	-1.08		-0.20	2.39	5.37	9.69	14.02	12.91	9.90	4.98	2.20	5.47
1989	0.07	-1.27		0.02	2.16	6.65	10.28	12.74	11.53	8.68	4.67	1.40	5.18
1990	-0.32	-1.55	-1.43	-0.43	0.93	4.17	9.72	13.27	12.54	11.05	5.51	2.59	4.67
1991		-1.54	-1.65	-1.23	-0.46	2.32	7.38	10.43	9.66	8.69	5.64	1.87	3.74
1992	-0.58	-1.66		-0.60	1.25	5.49	8.12	11.17	10.88	8.08	4.56	1.81	4.41
1993	-1.07	-1.70	-1.67	-0.92	1.18	3.80	7.91	11.77	10.87	8.70	5.45	2.47	3.90
1994	-0.39	-1.68	-1.48	-0.38	1.49	4.94	11.00	14.79	13.14	8.11	5.56	2.31	4.78
1995	0.34	-1.17	-1.63	-0.90	0.71	4.96	9.56	11.66	11.30	9.08	5.41	2.60	4.33
1996	0.35	-0.60	-0.60	0.09	2.26	5.55	9.01	13.15	12.08	8.43	5.43	2.59	4.81
1997	0.65			-0.55	0.59	4.02	9.39	12.91	11.46	9.34	5.75	2.32	5.59
1998	0.36		-0.45	0.35	2.99	6.35	10.74	13.91	11.04	8.77	5.57	2.21	5.62
1999	0.34		0.14	0.97	3.49	6.99	12.43	14.83	12.88	8.50	4.67	2.38	6.15

MONTHLY AVERAGE 10 METER TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						5.42							
1959	-0.69	-1.41	-1.61	-0.69	0.91	3.23	8.22	12.88	11.72	8.35	4.44	2.15	5.42
1960	0.29		-0.59	-0.32	1.28	5.74	9.45	11.47	12.90	9.12	5.13	1.88	3.96
1961	-0.07	-1.56	-1.69		0.47	5.16	10.39	13.01	11.31	10.71	7.12		5.12
1962	1.03	-0.72	-1.46		1.62	4.00	8.25	11.16	10.75	8.80	6.14		5.49
1963	0.81	-0.35	-1.12	-0.64	1.21	4.95	9.37	11.87	10.72	8.31	5.71	2.23	4.96
1964	0.10	-0.94	-1.52	-0.81	0.18	4.78	7.88	10.72	10.91	8.32	4.51	2.11	4.42
1965	0.33	-1.32	-1.25	-0.56	1.14	4.70	8.67	11.76		8.50	4.84	2.75	3.85
1966		-0.35	-0.66	-0.05	1.27	5.01	9.35	11.31	10.72	8.14	5.46	3.15	3.60
1967	1.19	-0.83	-1.61	-1.57	-0.17	4.53	10.76	15.16	13.24	10.83	7.29	3.33	4.85
1968	1.09	-0.06	-0.58	0.23	1.51	3.80	7.97	10.41	10.54	8.65	5.57	2.66	5.18
1969	0.52		-0.06	0.43	1.97	5.53	8.08	11.01	10.93	8.03	4.95	3.82	4.32
1970	1.15	-0.13	-0.06	0.12	2.42	5.74	10.14	12.97		8.73	6.52	2.47	5.02
1971	-0.49	-1.26	-0.94	0.49	2.98	7.10	10.11	13.60	11.82	8.43	4.92	2.11	4.55
1972	-0.31	-1.65	-1.46	-0.89	1.02	4.84	8.80	10.60	9.80	8.52	4.65		4.91
1973	-1.72	-1.67	-1.64	-1.22	0.16	3.79	10.13	12.00	11.93	9.40	5.19	2.22	3.99
1974	-0.58	-1.65	-1.48	-0.66	1.13	2.91	6.98	10.87	12.04	8.82	4.84		4.05
1975	-0.56	-1.37			0.72	2.81	9.65	12.81	10.80	8.06	4.61	1.88	3.93
1976	0.41	-1.24	-1.22	-0.19	1.82	4.78	6.79	11.13	12.20	8.30	3.56	1.56	4.94
1977	-0.42	-1.57	-1.26	-0.19	2.37	5.94	8.46	10.70	10.68	8.25	5.35	1.71	3.99
1978	0.12	-0.61	-0.97	-0.35	2.01	3.69	8.86	13.65	10.69	7.80	4.43		4.17
1979	0.41	-1.00	-1.28		0.34	4.43	10.48	13.79	12.37	8.46	5.39	2.20	4.48
1980	0.65		-1.47	-0.32	1.96	5.31	8.71	9.45	10.09		2.94	2.23	5.05
1981	0.18		-0.67	0.17	3.27	6.43	10.49		11.78	8.68	5.64	3.30	3.96
1982	0.82	-0.90	-1.37	-0.51	2.22	5.56	8.22		12.13	9.26	6.05		4.93
1983		-0.68		1.37	2.38	5.79	10.12	11.37	11.65	9.46	5.94	2.45	4.15
1984	-0.28	-1.26		-0.96	-0.45	2.71	9.42	10.44	12.11	8.95	4.60	1.87	5.99
1985	-1.01	-1.63	-1.65	-0.96	0.36	3.76	8.62	9.83	11.50	8.97	4.28	0.92	4.29
1986	-0.45	-1.50	-1.65	-0.55	2.18	5.86	9.87	12.84	11.53	7.92	4.76	1.35	3.58
1987	-0.53	-1.65	-1.36	-0.93	1.38	4.99	9.78	12.88	11.06	9.39	5.59	1.74	4.35
1988	-0.05	-1.04		-0.26	1.96	4.80	6.78	11.47	12.76	9.87	4.39	2.33	4.36
1989	0.06	-1.22		-0.15	1.61	6.28	10.23	12.37	11.13	8.42	4.71	1.43	4.82
1990	-0.40	-1.63	-1.57	-0.49	0.66	4.14	9.31	12.35	12.20	11.05	5.53	2.46	4.99
1991		-1.54	-1.66	-1.28	-0.59	1.98	6.80	8.27	9.64	8.72	5.63	1.83	4.47
1992	-0.60	-1.65	-1.54	-0.82	1.11	4.85	7.71	11.09	10.65	8.04	4.54	1.73	3.44
1993	-1.12	-1.74	-1.70	-0.95	0.96	3.64	7.23	10.79	10.30	8.68	5.37	2.41	3.76
1994	-0.38	-1.70	-1.59	-0.39	1.53	4.74	10.85	14.36	12.66	8.87	5.55	2.38	3.66
1995	0.27	-1.18	-1.61	-1.07	0.42	4.56	9.09	11.50	11.10	9.02	5.39	2.61	4.74
1996	0.35	-0.60	-0.60	0.07	2.14	5.42	8.75	12.43	12.06	8.43	5.42	2.58	4.18
1997	0.65			-0.57	0.43	3.34	8.75	12.65	11.46	9.39	5.73	2.30	4.70
1998	0.36		-0.50	0.32	2.66	5.96	10.16	13.43	10.51	8.71	5.54	2.21	5.41
1999	0.34		-0.21	0.72	3.23	6.71	12.19	14.60	12.80	8.50	4.59	2.36	5.40

MONTHLY AVERAGE 20 METER TEMPERATURES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										7.40			7.40
1954		-1.25		-0.70									-0.98
1955					-0.68			7.60					3.46
1956										6.82			6.82
1957		-1.63		-1.09		-0.08							-0.93
1958									11.42				11.42
1959	-0.61	-1.40	-1.61	-0.80	0.89	2.89	4.50	8.42	11.39	8.31	4.46	2.13	3.21
1960	0.22		-0.65	-0.35	0.77	4.72	4.57	8.34	12.64	9.08		1.60	4.09
1961	-0.11	-1.43	-1.71		0.14	1.84	6.68	7.50	10.56	10.36	7.03		4.09
1962	1.05	-0.72	-1.47		1.51	3.71	3.45	4.87	10.36	8.67	6.04		3.75
1963	0.73	-0.33	-1.13	-0.88	0.51	3.60	8.96	10.55	10.37	8.25	5.68	2.18	4.04
1964	0.10	-0.91	-1.49	-0.88	0.27	2.45	4.45	8.83	10.00	8.16	4.21	2.01	3.10
1965	0.31	-1.34	-1.30	-0.66	0.90	3.99	5.09	6.68	7.13	8.04	4.90	2.70	3.04
1966		-0.35	-0.79	-0.11	0.77	4.10	4.89	5.23	9.80	7.67	5.30	3.02	3.59
1967	1.13	-0.95	-1.47	-1.55	-0.64	3.38	5.16	9.19	12.51	10.68	6.94	3.25	3.97
1968	1.06	-0.09	-0.60	-0.04	1.35	2.93	7.43	8.18	9.87	8.48	5.39	2.68	3.89
1969	0.46	-0.04	-0.09	0.27	1.89	3.39	4.92	9.87	10.61	7.85	4.95	3.83	3.99
1970	1.16	-0.23	-0.20	-0.01	1.49	4.93	7.94	9.96		8.48	6.12	2.37	3.82
1971	-0.49	-1.24	-1.11	0.14	2.61	5.50	6.48	9.93	11.24	8.41	4.92	2.09	4.04
1972	-0.32	-1.66	-1.57	-1.03	0.80	3.13	7.08	9.33	9.20	8.42	4.66		3.46
1973	-1.76	-1.72	-1.67	-1.33	-0.40	1.24	4.67	9.40	11.65	9.28	5.10	2.26	3.06
1974	-0.55	-1.63	-1.59	-0.83	1.02	2.65	5.89	7.12	9.22	8.56	4.72		3.14
1975	-0.56	-1.43			0.33	2.71	5.11	5.89		7.83	4.33	1.87	2.90
1976	0.33		-1.09	-0.40	1.37	4.12	4.57	8.72	11.72	8.27	3.60	1.58	3.89
1977	-0.46	-1.59	-1.28	-0.29	1.57	3.91	5.18	10.01	9.88	8.17	5.05	1.75	3.49
1978	0.14	-0.62	-1.00	-0.58	1.72	2.55	8.06	12.42	10.27	7.75	4.37		4.10
1979	0.35	-1.03	-1.31		-0.09	1.05	5.46	11.22	12.40	8.90	5.46	2.14	4.05
1980	0.65		-1.44	-0.40	1.77	4.07	3.62	4.56	9.55		2.86	1.93	2.72
1981	-0.01		-0.62	0.05	2.51	4.71	10.28		10.60	8.01	5.52	3.33	4.44
1982	0.77	-0.90	-1.39	-0.70	1.70	5.15	5.16		11.83	8.99	6.08		3.67
1983		-0.79		-1.43	1.62	4.09	5.79	9.27	11.02	9.31	5.88	2.29	4.71
1984	-0.30	-1.29		-1.11	-1.14	-0.30	5.63	6.15	10.13	8.54	4.48	1.73	2.96
1985	-1.00	-1.61	-1.66	-1.11	0.06	2.65	4.68	7.76	10.96	8.90	4.09	0.92	2.89
1986	-0.43	-1.51	-1.67	-1.05	1.54	4.87	8.73	7.58	9.76	7.63	4.70	1.36	3.46
1987	-0.53	-1.65	-1.42	-1.16	0.86	4.03	7.00	10.11	9.53	9.22	5.32	1.72	3.59
1988	-0.14	-1.08		-0.47	1.41	3.95	2.37	5.82	12.24	9.30	2.96	2.30	3.51
1989	0.05	-1.27		-0.29	1.10	4.94	7.37	8.07	10.30	8.00	4.75	1.34	4.03
1990	-0.41	-1.66	-1.57	-0.54	0.60	3.15	6.42	8.90	8.45	10.15	5.44	2.39	3.44
1991		-1.54	-1.66	-1.39	-0.82	1.07	1.31	2.87	7.43	7.62	5.59	1.73	2.02
1992	-0.60	-1.66	-1.58	-0.95	0.96	3.95	6.70	7.81	9.22	7.35	4.51	1.72	3.12
1993	-1.13	-1.74	-1.71	-1.13	0.52	2.82	5.71	9.00	9.46	8.64	5.33	2.27	3.17
1994	-0.38	-1.70	-1.59	-0.51	1.40	3.35	8.83	9.51	12.10	8.70	5.32	2.22	3.94
1995	0.22	-1.24	-1.65	-1.19	0.04	3.57	6.50	9.57	9.19	8.58	5.30	2.59	3.46
1996	0.31	-0.61	-0.69	-0.14	1.70	5.08	6.58	9.54	10.64	8.24	5.29	2.55	4.04
1997	0.58			-0.65	0.16	2.07	3.94	9.48	11.27	8.75	5.68	2.26	4.35
1998	0.36		-0.53	0.08	1.44	3.31	5.99	4.25	9.05	8.61	5.42	2.15	3.65
1999	0.28		-0.57	0.35	2.62	4.57	6.67	8.34	10.18	8.40	4.33	2.31	4.32

MONTHLY AVERAGE 30 METER TEMPERATURES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						2.74	7.74	7.63	9.73	9.26	4.53	1.96	6.23
1947			-1.32		0.59	3.76	6.61			8.16	4.70		3.75
1948			-1.42	-0.89	0.16	2.12	3.89	3.72					1.26
1949						5.97		6.15	8.38			2.24	5.69
1950	0.29		-1.54	-0.73		3.63	5.76	5.29	7.37		4.32	3.29	3.08
1951	0.96	-0.37	-0.28	0.83	0.84	2.22	3.03	2.63	10.16	9.46			2.95
1952	-0.20			-0.16	1.32	1.88	2.83	3.51		10.24		2.60	2.75
1953		-0.03		-0.37	0.81	3.16	5.56	7.71	9.84	9.17	5.72	2.23	4.38
1954	-0.14	-0.95	-0.41		0.50	2.54	2.69	1.41		6.71	4.22	1.29	1.79
1955	0.70	-0.21		-1.39		2.33	6.23	7.93	9.40	6.40	4.66	2.13	3.82
1956	1.10	-0.16	-0.66	-0.65	0.40	3.18	3.33	1.40	7.21	7.71	5.48	2.74	2.59
1957	-0.09		-1.70		0.01	2.96	2.26	1.54	6.47	7.46	4.68	1.57	2.52
1958	0.55	0.13	-0.03	0.58	1.63	4.39	7.75	11.58		7.86	4.68	1.39	3.68
1959	-0.37	-1.42	-1.59	-0.70	0.82	2.19	2.28	2.37	10.29	7.81	4.26	2.03	2.33
1960	0.06	-0.47	-0.65	-0.40	0.28	0.92	0.55	2.65	9.15	7.76	4.96	1.56	2.20
1961	-0.13	-1.54	-1.71		-0.67	-0.34	2.35	3.86	8.05	10.11	6.74		2.67
1962	1.04	-0.72	-1.44		0.67	2.08	1.03	1.66	9.14	8.04	6.07		2.76
1963	0.70	-0.32	-1.15	-0.83	0.44	3.06	3.38		8.18	8.11	5.56	2.10	2.66
1964	0.08	-0.98	-1.52	-0.93	-0.49	-0.39	2.15	5.15	8.79	6.91	4.06	2.01	2.07
1965	0.38	-0.96	-1.06	-0.79	0.63	3.33	1.17	2.98	3.64	7.32	4.35	2.62	1.97
1966		-0.33	-0.97	-0.25	0.45	3.15	1.88	2.45	8.83	6.20	4.93	2.89	2.66
1967	0.80	-0.95	-1.60	-1.56	-1.20	0.85	1.35	3.76	7.25	10.09	6.44	3.24	2.37
1968	1.10	-0.06	-0.60	-0.10	0.82	2.52	5.52	4.29	8.01	8.27	5.37	2.61	3.15
1969	0.41	-0.01	-0.11	0.04	1.48	2.14	2.87	3.50	6.63	7.33	4.86	3.73	2.74
1970	1.09	-0.30	-0.52	-0.10	0.26	3.00	5.82	8.20		8.28	6.04	2.21	3.09
1971	-0.56	-1.27	-1.18	0.06	1.71	1.82	3.02	6.51	6.94	6.86	4.69	2.09	2.56
1972	-0.39	-1.68	-1.63	-1.23	-0.08	-0.05	2.75	3.00	7.19	7.37	4.66		1.81
1973	-1.78	-1.75	-1.71	-1.61	-1.21	0.04	1.67	6.21	11.01	9.19	4.73	2.07	2.24
1974	-0.55	-1.63	-1.59	-0.95	0.46	2.24	4.09	2.22	4.31	7.39	4.86		1.90
1975	-0.64	-1.39			0.09	2.08	2.89	2.91		5.13	4.22	1.77	1.90
1976	0.26	-1.26	-1.26	-0.50	0.52	2.97	3.11	2.83	7.43	7.94	3.59	1.56	2.27
1977	-0.50	-1.69	-1.43	-0.54	0.81	2.67	2.99	6.50	8.07	7.69	4.56	1.75	2.57
1978	0.14	-0.67	-1.02	-0.71	1.03	0.28	2.57	4.00	7.50	4.84	3.57		1.96
1979	0.13		-1.23	-0.28	-0.26	-0.25	1.83	5.81	11.73	8.55	5.34	1.99	3.03
1980	0.63		-1.48	-0.35	1.19	2.94	0.89	3.34	8.19		2.84	1.97	2.02
1981	0.16		-0.74	-0.08	1.06	1.22	0.32		4.96	7.62	5.24	3.30	2.31
1982	0.71	-0.89	-1.45	-0.82	0.65	3.60	2.01		7.95	8.84	6.04		2.66
1983		-0.79		-1.49	0.07	-0.53	0.94	4.44	8.47	8.99	5.85	2.19	2.81
1984	-0.36	-1.29		-1.07	-1.15	-0.84	2.49	2.44	3.85	5.98	4.42	1.20	1.42
1985	-1.13	-1.67	-1.70	-1.21	-0.31	0.16	0.95	3.18	9.18	8.49	3.98	0.89	1.73
1986	-0.51	-1.53	-1.65	-1.21	0.88	2.93	4.63	2.83	7.65	7.26	4.49	1.39	2.26
1987	-0.51	-1.62	-1.42	-1.20	-0.37	2.78	3.83	4.99	4.73	8.56	4.93	1.69	2.20
1988	-0.22	-1.08		-0.61	0.65	0.78	0.34	2.33	7.47	6.86	2.22	2.29	1.91
1989	0.02	-1.36		-0.68	0.36	1.82	3.99	3.27	4.22	5.81	4.49	1.24	2.11
1990	-0.45	-1.60	-1.63	-0.64	0.50	2.12	3.43	1.50	3.45	8.70	4.79	2.25	1.87
1991		-1.54	-1.66	-1.42	-1.12	0.08	-0.36	0.01	5.84	4.40	5.50	1.67	1.04
1992	-0.61	-1.67	-1.61	-1.05	0.66	2.34	4.84	3.68	6.21	5.52	4.40	1.69	2.03
1993	-1.15	-1.74	-1.72	-1.22	0.05	1.59	4.12	4.09	7.17	6.61	5.08	2.07	2.08
1994	-0.39	-1.69	-1.58	-0.66	0.97	1.38	3.94	3.59	8.04	7.54	4.82	1.99	2.33
1995	0.21	-1.26	-1.69	-1.53	-0.34	1.38	3.25	3.99	6.50	6.28	5.01	2.50	2.03
1996	0.28	-0.63	-0.81	-0.31	1.01	3.48	5.23	5.23	8.92	7.84	4.45	2.44	3.09
1997	0.49			-0.83	-0.22	1.17	1.95	2.52	7.06	8.13	5.64	2.21	2.81
1998	0.35		-0.56	-0.28	0.72	2.31	2.77	0.88	5.63	7.27	5.10	2.04	2.38
1999	0.16		-0.27	0.24	1.03	2.31	2.35	3.87	6.60	7.19	4.16	2.17	2.71

MONTHLY AVERAGE 50 METER TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						-0.91	2.16	2.02	3.09	7.55	3.99	1.99	2.84
1947			-1.39		0.16	1.59	2.23		0.75		2.90		1.04
1948			-1.45	-1.04	-0.65	1.23	1.21	1.68					0.16
1949						1.35		0.32	2.53			1.35	1.39
1950	0.00			-1.35		-0.04	-0.85	-0.80	-0.30		3.68	2.41	0.34
1951	0.64	-0.56	-0.76	0.30	-0.27	-0.73	-0.76	-0.62		2.06			-0.08
1952	-0.46			-0.62	-0.61	0.08	-0.94	-0.81		3.68		1.95	0.28
1953		-0.09		-1.30	-1.14	-0.15	0.39	1.81	3.63	6.31	5.36	2.26	1.71
1954	-0.19	-1.23	-1.12	-0.91	-0.29	-0.10	-0.65	-0.27	-0.24	3.13	4.16	1.35	0.30
1955	0.71	-0.26		-1.43	-1.07	-0.60	-0.42	1.12	3.47	4.47	3.32	1.70	1.00
1956	0.49	-0.29	-0.67	-0.52	-0.54	-0.82	-0.33	-0.74	1.40	4.79	4.83	2.52	0.84
1957	-0.50	-1.67	-1.66	-1.20	-0.93	-0.94	-1.20	-0.70	1.64	3.12	3.42	1.44	0.07
1958	0.53	0.12	-0.12	-0.12	-0.47	-0.39	-0.06	1.04	4.20	4.95	3.96	1.04	1.22
1959	-0.46	-1.51	-1.59	-0.92	-0.57	0.77	0.41	-0.32		4.75	3.11	1.84	0.50
1960	0.19		-0.70	-0.63	-0.52	-0.74	-0.95	-0.65	0.64	2.85	4.07	1.24	0.44
1961	-0.18	-1.54	-1.75		-0.87	-0.71	-0.55	0.59	2.99		5.68		0.41
1962	0.97	-0.69	-1.42		-0.31	-0.24	-0.17	-0.10	2.16	6.16	4.29		1.07
1963	0.63	-0.32	-1.17	-1.07	-0.06	-0.06	-0.57	1.05	2.44	5.78	2.76	1.69	0.93
1964	0.11	-0.97	-1.60	-1.10	-0.87	-1.08	-0.79	-0.19	2.97	4.50	3.67	1.62	0.52
1965	0.16	-0.94	-1.05	-1.27	-0.34	0.24	-0.13	-0.26	3.07	6.02	3.95	2.41	0.99
1966		-0.38	-1.05	-0.42	-0.11	0.45	-0.24	0.11	2.47	4.24	4.28	2.64	1.09
1967	0.73	-1.02	-1.58	-1.57	-1.61	-1.33	-1.40	-0.86	2.81	6.11	4.86	2.96	0.68
1968	1.07	-0.20	-0.88	-0.65	0.80	1.50	1.44	1.84	4.70	7.96	5.34	2.20	2.09
1969	0.30	-0.04	-0.23	-0.06	0.62	0.53	-0.39	-0.75	2.28	6.53	3.84	2.17	1.23
1970	0.39	-0.47	-0.81	-0.41	-0.67	-0.56	0.17	-0.37		6.90	5.00	1.99	1.01
1971	-0.67	-1.26	-1.35	-0.47	0.11	-0.18	-0.18	0.10	1.93	4.81	4.18	1.97	0.75
1972	-0.41	-1.68	-1.71	-1.39	-0.92	-1.22	-1.44	-0.65	0.48	1.36	2.91		-0.42
1973	-1.70	-1.61	-1.65	-1.59	-1.58	-1.51	-1.08	0.58	4.63	5.82	3.91	1.93	0.51
1974	-0.62	-1.67	-1.66	-1.30	-0.88	0.25	0.54	-0.16	-0.15	0.85	4.19		-0.06
1975	-0.68	-1.30			-0.09	0.59	0.66	0.22	-0.07	2.51	3.59	1.33	0.68
1976	-0.17	-1.40	-1.44	-0.59	-0.28	1.30	1.06	1.21	2.44	4.46	3.04	1.55	0.93
1977	-0.53	-1.57	-1.54	-1.23	-0.63	-1.36	-1.30	-0.23	3.99	4.65	3.77	1.66	0.47
1978	0.10	-0.79	-0.96	-1.17	-0.72	-1.28	-1.12	0.30	6.28		2.79		0.34
1979	0.12	-1.04	-1.28	-0.29	-0.29	-0.72	-0.50	0.33	3.62	4.48	4.20	1.74	0.86
1980	0.61		-1.37	-0.40	-0.21	0.50	-0.66	0.71	4.61		2.58	1.84	0.82
1981	0.03		-0.87	-0.54	-0.67	-0.73	-0.71		0.85	5.29	4.76	3.14	1.06
1982	0.58	-0.89	-1.52	-1.22	-0.50	0.06	-0.36		2.19	4.21	5.94		0.85
1983		-0.82		-1.59	-1.49	-1.53	-1.24	-0.48	1.23	5.71	5.46	1.99	0.72
1984	-0.51	-1.45		-1.16	-1.35	-1.39	-0.30	0.25	0.66	3.98	3.99	0.65	0.31
1985	-1.32	-1.70	-1.74	-1.32	-0.56	-0.97	-1.07	-0.20	0.75	6.20	3.54	0.44	0.17
1986	-0.70	-1.55	-1.71	-1.29	-0.17	-0.19	0.13	0.14	2.36	6.43	4.04	1.40	0.74
1987	-0.51	-1.62	-1.58	-1.57	-1.33	-0.32	0.68	0.97	0.85	2.35	4.03	1.56	0.29
1988	-0.19	-1.02		-1.15	-0.63	-0.77	-1.08	0.09	1.23	2.14	1.06	2.19	0.17
1989	-0.08	-1.42		-1.25	-0.83	-0.25	0.70	0.09	1.97	2.33	3.28	1.04	0.51
1990	-0.53	-1.66	-1.64	-1.05	0.23	0.40	0.60	0.59	0.93	4.75	3.28	1.96	0.66
1991		-1.58	-1.67	-1.56	-1.45	-0.72	-1.33	-1.03	2.04	-0.25	3.41	1.40	-0.25
1992	-0.63	-1.66	-1.63	-1.23	-0.44	-0.55	1.02	-0.05	0.15	2.75	4.07	1.63	0.29
1993	-1.32	-1.74	-1.73	-1.59	-0.66	-1.08	1.56	-0.14	1.22	2.73	3.42	1.87	0.21
1994	-0.42	-1.67	-1.66	-0.77	0.41	-0.61	-0.65	-0.12	1.22	3.65	4.27	1.81	0.46
1995	0.09	-1.33	-1.70	-1.70	-1.35	-0.74	-0.30	0.11	0.88	1.68	3.86	2.38	0.16
1996	0.23	-0.64	-1.02	-0.52	-0.50	0.90	1.61	1.65	4.75	5.72	3.66	2.25	1.51
1997	0.42			-1.04	-1.08	-0.68	-0.48	-0.31	1.42	1.86	3.53	1.88	0.55
1998	0.32		-0.62	-0.81	-0.60	-0.39	-1.08	-1.13	0.23	3.50	4.00	1.73	0.47
1999	0.16		-0.22	-0.16	0.25	-0.24	-0.11	0.25	2.07	2.98	3.45	1.59	0.91

MONTHLY AVERAGE 75 METER TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			-1.32		-0.81	-0.11	0.19						-0.51
1948			-1.49	-1.34	-1.27	-1.16	-0.36	0.49					-0.86
1949						-0.43		-0.91	-0.41			1.27	-0.12
1950	-0.15		-1.64	-1.54		-1.38	-1.50	-1.20	-0.04		2.55	1.99	-0.32
1951	0.48	-0.50	-1.14	-1.26	-1.10	-1.15	-1.02	-0.61	0.72	0.96			-0.46
1952	-0.43			-1.12	-1.11	-0.79	-1.00	-0.58		0.29		1.14	-0.45
1953		-0.16		-1.23	-1.23	-1.23	-1.01	0.11	1.00	1.01	3.51	1.75	0.25
1954	-0.09	-1.05	-1.33	-1.00	-0.80	-0.83	-1.08	-0.91	-0.84	0.76	3.01	1.19	-0.25
1955	0.66	-0.28		-1.46	-1.30	-1.20	-1.11	-0.86	-0.07	1.96	2.67	1.40	0.04
1956	0.29	-0.32	-0.70	-0.73	-0.99	-1.23	-1.05	-1.03	-0.72	0.29	1.82	1.06	-0.28
1957	-0.47	-1.67	-1.67	-1.33	-1.43	-1.56	-1.56	-1.44	-0.98	-0.47	1.41	1.13	-0.84
1958	0.37	-0.09	-0.45	-0.80	-0.95	-1.08	-1.34	-1.09	0.61	1.56	3.15	0.87	0.06
1959	-0.48	-1.42	-1.55	-1.07	-0.95	-0.96	-1.00	-0.88	0.05	0.09	0.68	1.21	-0.52
1960	-0.05	-0.68	-0.75	-0.69	-0.95	-1.29	-1.30	-1.25	-0.95	0.12	1.41	0.75	-0.47
1961	-0.29	-1.53	-1.73		-0.93	-1.27	-1.18	-0.58	0.12	1.05	2.84		-0.35
1962	0.63	-0.74	-1.42		-0.91	-1.05	-1.21	-1.25	-0.31	0.69	0.61		-0.50
1963	0.41	-0.43	-1.41	-1.20	-0.89	-1.10	-1.00	-0.93	-0.03	0.75	1.02	1.16	-0.30
1964	0.01	-0.94	-1.56	-1.31	-1.02	-1.19	-1.26	-1.25	-0.68	0.67	2.95	1.35	-0.35
1965	0.00	-0.94	-1.20	-1.42	-0.55	-0.59	-0.99	-1.02	0.10	1.08	2.05	1.79	-0.14
1966		-0.35	-0.92	-0.60	-0.57	-0.43	-0.88	-0.72	-0.07	0.38	2.10	1.62	-0.04
1967	0.69	-1.00	-1.55	-1.51	-1.66	-1.60	-1.62	-1.48	0.97	2.33	2.81	2.36	-0.11
1968	1.05	-0.36	-0.99	-0.96	-0.31	0.67	0.21	0.01	0.19	0.58	3.04	1.73	0.41
1969	0.17	-0.18	-0.38	-0.23	-0.18	-0.54	-1.02	-1.10	-0.02	2.24	1.59	0.82	0.10
1970	-0.04	-0.56	-0.92	-0.66	-1.06	-1.05	-1.37	-1.47		0.44	1.05	1.10	-0.41
1971	-0.60	-1.15	-1.30	-1.25	-1.18	-1.28	-0.84	-0.54	-0.28	3.21	1.94	1.38	-0.16
1972	-0.40	-1.59	-1.76	-1.58	-1.49	-1.39	-1.51	-1.33	-0.99	-0.54	1.53		-1.00
1973	-1.72	-1.69	-1.69	-1.74	-1.75	-1.72	-1.27	-0.97	0.07	0.12	0.62	1.78	-0.83
1974	-0.54	-1.69	-1.71	-1.56	-1.38	-1.38	-1.52	-1.12	-0.91	-0.47	0.46		-1.07
1975	-0.61	-1.35			-0.50	0.04	-0.27	-0.72	-0.76	1.70	2.41	1.23	0.12
1976	-0.09	-1.31	-1.64	-1.33	-1.17	-0.52	0.34	-0.63	0.48	1.16	2.35	1.36	-0.08
1977	-0.52	-1.43	-1.72	-1.65	-1.62	-1.52	-1.62	-1.09	0.28	0.09	2.04	1.49	-0.61
1978	-0.03	-0.67	-1.05	-1.44	-1.51	-1.68		-1.16	0.15	-0.54	1.28		-0.67
1979	-0.09	-1.06	-1.48		-0.43	-1.00	-1.01	-1.02	-0.47	-0.09	2.35	1.48	-0.26
1980	0.62		-1.40	-0.89	-0.99	-0.78	-1.26	-1.16	-0.45		2.62	1.58	-0.21
1981	-0.10		-1.00	-0.80	-1.09	-1.04	-1.10		-0.44	1.16	3.61	2.14	0.13
1982	0.47	-0.95	-1.57	-1.39	-1.28	-1.07	-1.14		-0.12	2.32	5.06		0.03
1983		-0.84		-1.66	-1.58	-1.54	-1.52	-1.16	-0.38	0.08	1.65	1.49	-0.55
1984	-0.57	-1.63		-1.30	-1.47	-1.55	-1.26	-1.14	-0.86	-0.05	1.88	0.15	-0.71
1985	-1.44	-1.73	-1.76	-1.39	-1.14	-1.30	-1.46	-1.36	-0.39	0.43	1.80	0.35	-0.78
1986	-0.88	-1.56	-1.70	-1.42	-1.02	-1.46	-1.11	-1.26	-0.20	1.98	2.88	1.23	-0.38
1987	-0.52	-1.61	-1.65	-1.65	-1.53	-1.43	-0.79	-0.53	-0.50	-0.04	1.30	1.11	-0.65
1988	-0.19	-1.07		-1.18	-1.34	-1.00	-1.22	-0.87	0.03	0.59	0.56	1.42	-0.39
1989	-0.46	-1.42		-1.49	-1.43	-1.23	-0.86	-0.72	0.30	0.67	2.18	0.69	-0.34
1990	-0.55	-1.59	-1.68	-1.16	-0.51	-0.73	-0.73	-0.44	-0.09	0.70	1.13	1.38	-0.36
1991		-1.60	-1.69	-1.62	-1.61	-1.43	-1.63	-1.55	-1.07	-1.39	-0.34	1.03	-1.17
1992	-0.69	-1.64	-1.66	-1.33	-1.16	-1.33	-1.36	-1.35	-1.09	0.44	2.22	1.22	-0.64
1993	-1.29	-1.73	-1.70	-1.57	-1.35	-1.59	-1.41	-1.47	-1.00	0.02	0.93	1.45	-0.89
1994	-0.48	-1.63	-1.80	-1.06	-0.52	-1.31	-1.42	-1.36	-0.66	1.58	1.46	1.33	-0.49
1995	-0.08	-1.40	-1.68	-1.73	-1.53	-1.44	-1.42	-1.16	-0.34	-0.14	1.57	1.80	-0.63
1996	0.17	-0.82	-0.99	-0.67	-0.86	-0.71	-0.60	-0.12	2.00	1.68	2.63	1.84	0.30
1997	0.27			-1.17	-1.21	-1.33	-1.26	-1.32	-0.56	-0.70	0.86	1.37	-0.51
1998	0.12		-1.10	-1.22	-1.01	-1.36	-1.42	-1.49	-1.00	-0.91	0.65	1.03	-0.70
1999	0.08		-0.77	-0.74	-0.43	-0.82	-0.85	-0.83	-0.46	0.13	2.18	1.50	-0.09

MONTHLY AVERAGE 100 METER TEMPERATURES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						-1.46	-1.43	-1.12	-1.08	-0.32	0.70	0.84	-0.55
1947			-1.32		-1.30	-1.06	-0.77		-0.23	-0.39			-0.85
1948			-1.53	-1.65	-1.48	-1.19	-1.15	-0.93					-1.32
1949						-1.32		-1.11	-1.15			0.93	-0.66
1950	-0.17			-1.57		-1.42	-1.53	-1.48	-1.27		0.90	0.88	-0.71
1951	0.16	-0.61	-1.10	-0.95	-1.18	-1.20	-1.33	-0.99	-0.22	-0.02			-0.74
1952	-0.27			-1.04	-0.93	-1.00	-1.27	-0.88	-0.85	-0.74		0.84	-0.68
1953		-0.15		-1.08	-0.98	-1.36	-1.20	-0.75		-0.04	0.87	0.98	-0.41
1954	0.11	-1.05	-1.56	-1.31	-1.08	-0.85	-1.33	-1.36	-1.10	-0.41	1.55	1.14	-0.60
1955	0.70	-0.24		-1.26	-1.24	-1.28	-1.21	-1.17	-1.07		1.72	0.99	-0.41
1956	0.37	-0.29	-0.68	-1.05	-1.15	-1.30	-1.28	-1.26	-1.05	-0.38	0.99	1.00	-0.51
1957	-0.31	-1.56	-1.64	-1.54	-1.58	-1.61	-1.60	-1.39	-1.24	-0.99	0.75	0.19	-1.04
1958	0.29	-0.33	-0.50	-0.61	-1.13	-1.23	-1.28	-1.52	-1.29	0.13	1.40	0.71	-0.45
1959	-0.57	-1.28	-1.54	-1.48	-1.26	-1.21	-1.25	-1.15	-0.71	-1.11	-0.15	0.79	-0.91
1960	-0.02	-0.75	-0.77	-1.01	-1.39	-1.34	-1.38	-1.37	-1.33	-1.07	-0.45	0.48	-0.87
1961	-0.26	-1.48	-1.74		-1.37	-1.33	-1.29	-1.10	-0.97	-0.18	0.29		-0.94
1962	0.66	-0.45	-1.40		-1.28	-1.05	-1.21	-1.37	-0.95	-0.79	-0.50		-0.83
1963	0.19	-0.40	-1.51	-1.54	-1.37	-1.32	-1.33	-1.25	-1.02	-0.79	-0.28	0.48	-0.85
1964	-0.08	-0.98	-1.54	-1.55	-1.23	-1.31	-1.41	-1.49	-1.30	-1.05	1.22	0.95	-0.81
1965	-0.02	-0.89	-1.09	-1.41	-1.41	-1.37	-1.37	-1.22	-0.94	-0.57	0.30	0.82	-0.76
1966		-0.33	-0.70	-0.64	-0.71	-0.66	-0.81	-0.78	-0.58	-0.42	-0.23	0.67	-0.47
1967	0.50	-0.93	-1.60	-1.48	-1.61	-1.59	-1.58	-1.37	-0.41	0.36	0.73	1.71	-0.61
1968	0.93	-0.22	-0.87	-1.21	-1.04	-0.77	-1.04	-1.00	-0.90	-0.53	-0.01	1.12	-0.46
1969	0.27	-0.16	-0.37	-0.30	-0.69	-1.01	-1.07	-1.23	-1.17	-0.35	-0.15	-0.52	-0.56
1970	-0.40	-0.55	-0.95	-1.02	-1.38	-1.30	-1.43	-1.48		-1.19	-1.02	0.29	-0.95
1971	-0.61	-1.01	-1.25	-1.51	-1.39	-1.55	-1.39	-1.16	-1.03		0.00	0.80	-0.92
1972	-0.36	-1.10	-1.73	-1.56	-1.50	-1.49	-1.61	-1.61	-1.34	-0.66	1.05		-1.08
1973	-1.70	-1.68	-1.70	-1.71	-1.75	-1.71	-1.60	-1.49	-1.15	-1.18	-0.92	0.58	-1.33
1974	-0.78	-1.62	-1.75	-1.67	-1.62	-1.60	-1.68	-1.63	-1.50	-1.15	-0.77		-1.43
1975	-0.61	-1.27			-0.77	-0.76	-0.90	-1.11	-1.15	-0.46	1.03	1.05	-0.50
1976	-0.24	-1.10	-1.51	-1.61	-1.51	-1.23	-0.91	-1.15	-0.57	-0.67	0.19	0.69	-0.80
1977	-0.56	-1.58	-1.74	-1.69	-1.46	-1.59	-1.61	-1.45	-1.20	-1.14	-0.75	0.94	-1.15
1978	0.14	-0.57	-1.05	-1.43	-1.53	-1.55		-1.38	-0.70	-0.78	1.07		-0.78
1979	-0.24	-0.94	-1.44	-0.48	-1.03	-1.37	-1.29	-1.35	-1.18	-1.07	-0.52	0.85	-0.84
1980	0.04		-1.66	-1.44	-1.31	-1.36	-1.58	-1.48	-1.31		1.16	0.35	-0.86
1981	-0.07		-0.96	-0.94	-1.19	-1.14	-1.22		-0.99	-0.71	0.99	1.60	-0.46
1982	0.42	-0.85	-1.62	-1.44	-1.44	-1.40	-1.44		-0.78	-0.72			-1.03
1983		-0.67		-1.60	-1.59	-1.46	-1.57	-1.11	-1.26	-1.11	-0.64	0.83	-1.02
1984	-0.50	-1.55		-1.48	-1.54	-1.57	-1.55	-1.51	-1.49	-1.34	-0.15	-0.02	-1.15
1985	-1.35	-1.69	-1.73	-1.61	-1.57	-1.54	-1.62	-1.56	-1.49	-1.23	-0.43	0.34	-1.29
1986	-0.71	-1.49	-1.71	-1.51	-1.47	-1.60	-1.54	-1.60	-1.26	-0.76	-0.12	0.65	-1.09
1987	-0.69	-1.52	-1.56	-1.63	-1.50	-1.56	-1.38	-1.31	-1.17	-0.90	-0.20	0.45	-1.08
1988	-0.29	-0.87		-1.54	-1.46	-1.39	-1.34	-1.14	-0.66	-0.21	0.18	0.78	-0.72
1989	-0.46	-1.46		-1.59	-1.50	-1.46	-1.24	-1.13	-0.64	-0.41	0.50	0.65	-0.79
1990	-0.59	-1.54	-1.62	-1.42	-1.00	-1.21	-1.24	-1.03	-0.61	-0.46	-0.13	0.81	-0.84
1991		-1.58	-1.68	-1.63	-1.64	-1.69	-1.67	-1.66	-1.35	-1.53	-1.27	-0.07	-1.43
1992	-0.69	-1.61	-1.81	-1.68	-1.34	-1.45	-1.51	-1.58	-1.54	-1.43	-0.06	0.69	-1.17
1993	-1.22	-1.74	-1.73	-1.61	-1.51	-1.66	-1.59	-1.54	-1.50	-1.23	-0.50	0.41	-1.29
1994	-0.55	-1.52	-1.80	-1.63	-1.19	-1.58	-1.62	-1.65	-1.34	-1.14	0.64	0.79	-1.05
1995	-0.21	-1.39	-1.67	-1.75	-1.65	-1.61	-1.58	-1.53	-1.16	-1.03	-0.50	1.00	-1.09
1996	0.10	-0.67	-0.70	-0.87	-1.19	-1.09	-0.94	-0.66	0.41	-0.09	0.38	1.48	-0.32
1997	0.42			-1.45	-1.36	-1.45	-1.49	-1.45	-1.21	-1.23	-0.37	1.04	-0.86
1998	0.09		-1.24	-1.32	-1.44	-1.50	-1.46	-1.58	-1.43	-1.36	-0.99	0.44	-1.07
1999	0.01		-0.96	-1.30	-1.06	-1.19	-1.27	-1.23	-0.93	-0.73	-0.36	0.89	-0.74

MONTHLY AVERAGE 125 METER TEMPERATURES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									-0.67	-0.69			-0.68
1950									-1.33			0.15	-0.59
1951						-1.39							-1.39
1957				-1.70									-1.70
1964			-1.35	-1.64	-1.30	-1.50	-1.49	-1.44	-1.47	-1.10	-0.26		-1.28
1965	-0.17	-0.89	-1.10	-1.44	-1.53	-1.45	-1.31	-1.18	-0.78	-1.08	-0.78	-0.58	-1.02
1966		-0.30	-0.56	-0.65	-1.05	-0.85	-0.71	-0.82	-0.68	-0.43	-0.41	0.16	-0.57
1967	0.21	-0.79	-1.37	-1.40	-1.52	-1.51	-1.54	-1.48	-1.17	-0.92	-0.78	0.82	-0.95
1968	0.84	-0.10	-0.38	-0.96	-0.96	-1.09	-1.29	-1.34	-1.13	-1.02	-1.00	0.20	-0.69
1969	0.36	-0.03	-0.49	-0.54	-0.78	-0.93	-0.99	-1.19	-1.21	-1.11	-0.85	-0.72	-0.71
1970	-0.35	-0.46	-0.90	-1.23	-1.22	-1.21	-1.21	-1.48		-1.42	-1.45	-0.25	-1.02
1971	-0.71	-0.92	-1.05	-1.44	-1.42	-1.38	-1.48	-1.39	-1.40	-0.87	-0.91	0.57	-1.03
1972	-0.08	-0.69	-1.50	-1.51	-1.48	-1.36	-1.65	-1.66	-1.54	-1.42	-0.28		-1.20
1973	-1.67	-1.63	-1.71	-1.70	-1.68	-1.62	-1.63	-1.69	-1.61	-1.59	-1.35	-0.13	-1.50
1974	-0.81	-1.59	-1.68	-1.69	-1.66	-1.68	-1.70	-1.67	-1.63	-1.56	-1.26		-1.54
1975	-0.61	-1.33			-1.34	-1.47	-1.41	-1.37	-1.26	-0.46	-0.01	0.75	-0.85
1976	-0.09	-0.63	-1.35	-1.56	-1.36	-1.12	-1.13	-1.38	-1.36	-1.38	-1.15	-0.88	-1.12
1977	-0.71	-1.40	-1.69	-1.55	-1.52	-1.49	-1.62	-1.58	-1.54	-1.46	-1.24	-0.13	-1.33
1978	-0.05	-0.27	-0.86	-1.29	-1.25	-1.50	-1.37	-1.17	-1.33		0.34		-0.88
1979	-0.31	-0.59		-0.22	-0.95	-1.41	-1.29	-1.42	-1.32	-1.16	-0.84	-0.18	-0.88
1980	-0.29		-1.56	-1.44	-1.15	-1.41	-1.53	-1.55	-1.50		-0.90	-0.73	-1.21
1981	-0.57		-0.81	-1.03	-1.21	-1.14	-1.21		-1.21	-1.10	-0.83	-0.24	-0.94
1982	0.11	-0.54	-1.54	-1.44	-1.48	-1.41	-1.49		-1.11	-0.97	-1.07		-1.09
1983		-0.65			-1.51		-1.57	-1.62	-1.62	-1.49	-1.33	0.08	-1.21
1984	-0.40	-1.11		-1.48	-1.56	-1.50	-1.55	-1.53	-1.58	-1.46	-1.25	-0.25	-1.24
1985	-1.30	-1.69	-1.71	-1.66	-1.57	-1.63	-1.65	-1.60	-1.60	-1.36	-1.17	0.29	-1.39
1986	-0.58	-1.23	-1.58	-1.52	-1.57	-1.55	-1.59	-1.50	-1.37	-1.19	-0.62	-0.12	-1.20
1987	-0.84	-1.23	-1.17	-1.49	-1.45	-1.58	-1.64	-1.46	-1.54	-1.39	-0.98	-0.59	-1.28
1988	-0.63	-0.82		-1.54	-1.50	-1.32	-1.38	-1.32	-1.07	-0.80	-0.06	0.45	-0.91
1989	-0.40	-1.13		-1.60	-1.38	-1.34	-1.39	-1.44	-1.10	-1.12	-0.59	0.05	-1.04
1990	-0.47	-1.35	-1.42	-1.60	-1.39	-1.45	-1.34	-1.25	-1.01	-0.86	-0.78	0.07	-1.07
1991		-1.54	-1.68	-1.58	-1.60	-1.67	-1.65	-1.65	-1.52	-1.61	-1.47	-1.03	-1.55
1992	-0.54	-1.31	-1.80	-1.74	-1.47	-1.50	-1.55	-1.61	-1.58	-1.54	-1.00	-0.03	-1.31
1993	-0.99	-1.70	-1.74	-1.62	-1.52	-1.61	-1.63	-1.64	-1.61	-1.59	-1.32	-0.68	-1.47
1994	-0.57	-1.35	-1.77	-1.66	-1.55	-1.64	-1.67	-1.73	-1.61	-1.57	-0.44	-0.25	-1.32
1995	-0.53	-1.25	-1.73	-1.70	-1.56	-1.55	-1.54	-1.62	-1.41	-1.33	-0.84	0.10	-1.25
1996	0.01	-0.39	-0.52	-0.98	-1.29	-1.16	-1.15	-0.98	-0.43	-0.82	-0.57	0.26	-0.67
1997	0.07			-1.45	-1.31	-1.46	-1.45	-1.44	-1.41	-1.35	-1.00	0.55	-1.03
1998	0.02		-1.08	-1.14	-1.27	-1.49	-1.45	-1.56	-1.50	-1.42	-1.14	-0.62	-1.15
1999	-0.10		-0.90	-1.24	-1.19	-1.36	-1.38	-1.32	-1.20	-1.09	-1.02	0.32	-0.95

MONTHLY AVERAGE 150 METER TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							-1.43	-1.41	-1.26	-1.25	-1.19	-0.03	-1.10
1947			-1.24		-1.30	-1.23	-1.25		-0.69	-0.82	-0.67		-1.03
1948			-1.34	-1.43	-1.42	-1.39	-1.35	-1.47					-1.40
1949						-1.34		-1.23	-1.07			-0.72	-1.09
1950	-0.53		-1.60	-1.60		-1.60	-1.62	-1.54	-1.54		-1.27	-0.56	-1.32
1951	0.23	-0.29	-0.71	-0.80	-0.92	-1.13	-1.22	-1.16	-0.71	-0.93			-0.76
1952	-0.74			-1.04	-0.57	-0.61	-1.02	-1.25	-1.24	-0.95		-0.38	-0.87
1953		-0.14		-0.23	-0.68	-1.11	-1.32	-1.29	-0.98	-1.01	-1.01	-0.36	-0.81
1954	-0.30	-0.47	-1.02	-1.05	-1.33	-1.23	-1.42	-1.47	-1.37	-1.16	-0.97	-0.68	-1.04
1955	0.08	-0.16		-0.79	-1.10	-1.04	-1.15	-1.26	-1.11	-1.02	-0.97	-0.50	-0.82
1956	-0.23	-0.03	-0.23	-0.59	-0.93	-1.25	-1.26	-1.25	-1.34	-1.29	-1.01		-0.86
1957	-0.59	-0.88	-1.52	-1.48	-1.25	-1.48	-1.55	-1.41	-1.22	-1.05	-1.16	-0.93	-1.21
1958	-0.62	-0.62	-0.66	-0.67	-0.72	-0.93	-1.05	-1.10	-1.25	-0.99	-0.97	0.14	-0.79
1959	0.07	-1.09	-1.44	-1.45	-1.46	-1.49	-1.43	-1.41	-1.44	-1.39	-1.33	-0.88	-1.23
1960	-0.29	-0.58	-0.67	-0.80	-1.16	-1.22	-1.14	-1.33	-1.07	-1.08	-1.14	-0.82	-0.94
1961	-0.56	-1.12	-1.37		-1.43	-1.34	-1.28	-1.34	-1.25	-1.16	-1.05		-1.19
1962	0.40	0.12	-1.05		-1.04	-1.03	-0.97	-1.15	-1.19	-0.89	-0.77		-0.76
1963	-0.18	-0.24	-0.65	-1.35	-1.21	-1.12	-1.22	-1.19	-1.26	-1.14	-1.00	-0.55	-0.93
1964	-0.11	-0.82	-1.29	-1.56	-1.40	-1.40	-1.43	-1.36	-1.33	-1.31	-0.89	-0.77	-1.14
1965	-0.41	-0.82	-0.89	-1.26	-1.49	-1.35	-1.11	-1.05	-1.16	-0.67	-0.82	-0.28	-0.94
1966			-0.08	-0.47	-0.87	-0.45	-0.36	-0.50	-0.04	-0.25	-0.30	-0.18	-0.35
1967	-0.01	-0.31	-1.01	-1.29	-1.26	-1.38	-1.38	-1.50	-1.32	-1.17	-0.87	-0.37	-0.99
1968	0.34	0.09	-0.18	-0.44	-0.25	-0.89	-1.04	-1.08	-1.07	-1.09	-0.98	-0.78	-0.61
1969	-0.71	-0.11	-0.41	-0.43	-0.50	-0.62	-0.80	-0.78	-0.89	-0.95	-0.96	-0.92	-0.67
1970	-0.45	-0.57	-0.63	-0.69	-0.65	-0.82	-0.44	-1.16		-1.26	-1.37	-0.64	-0.79
1971	-0.63	-0.70	-0.72	-1.11	-1.31	-1.24	-1.29	-1.37	-0.97	-1.15	-1.03	-0.22	-0.98
1972	-0.14	-0.77	-1.36	-1.36	-1.38	-1.43	-1.59	-1.61	-1.58	-1.52	-1.17		-1.26
1973	-1.49	-1.55	-1.54	-1.55	-1.56	-1.58	-1.55	-1.68	-1.66	-1.48	-1.38	-0.91	-1.49
1974	-0.95	-1.46	-1.61	-1.66	-1.55	-1.64	-1.72	-1.69	-1.59	-1.57	-1.46		-1.54
1975	-0.47	-0.94			-1.43	-1.45	-1.49	-1.22	-0.93	-1.01	-0.88	-0.21	-1.00
1976	-0.06	-0.33	-0.94	-1.02	-0.91	-0.99	-1.16	-1.32	-1.39	-1.40		-1.13	-0.97
1977	-0.87	-1.07	-1.20	-1.09	-1.33	-1.14		-1.54	-1.51	-1.31	-1.03	-1.12	-1.20
1978	-0.90	-0.41		-1.11	-0.99	-0.79	-1.24	-1.08	-1.17	-1.12	-0.67		-0.95
1979	-0.25	-0.74	-1.00	-0.84	-1.32	-1.38	-1.04	-1.32	-1.19	-0.80	-1.02	-0.71	-0.97
1980	-0.29		-0.85	-1.09	-0.91		-1.39	-1.22	-1.34		-1.04	-0.96	-1.01
1981	-0.86		-0.65	-0.83	-0.87	-0.84	-1.22		-1.00	-1.10	-1.00	-0.64	-0.90
1982	-0.36	-0.57	-1.36	-1.24	-1.26	-1.26	-1.30		-1.25	-1.11	-1.13		-1.08
1983		-0.55		-1.43	-1.44	-1.39	-1.52	-1.49	-1.51	-1.51	-1.51	-0.88	-1.32
1984	-0.82	-1.09		-1.49	-1.46	-1.31	-1.45	-1.49	-1.46	-1.43	-1.38	-1.01	-1.31
1985	-1.14	-1.64	-1.64	-1.60	-1.58	-1.65	-1.61	-1.63	-1.61	-1.59	-1.45	-0.94	-1.51
1986	-0.81	-0.94	-1.37	-1.47	-1.52	-1.34	-1.40	-1.24	-1.17	-0.99	-0.91	-0.76	-1.16
1987	-0.62	-0.68	-0.91	-1.21	-1.21	-1.47	-1.48	-1.50	-1.46	-1.37	-1.24	-0.87	-1.17
1988	-0.64	-0.69		-1.38	-1.46	-1.15	-1.25	-1.26	-1.11	-1.10	-0.04	-0.28	-0.94
1989	-0.60	-0.77		-1.28	-1.11	-1.27	-1.34	-1.48	-1.37	-1.35	-1.18	-0.68	-1.13
1990	-0.57	-1.03	-1.27	-1.52	-1.54	-1.46	-1.37	-1.36	-1.33	-1.14	-1.42	-1.17	-1.27
1991		-1.37	-1.66	-1.48	-1.53	-1.60	-1.60	-1.62	-1.62	-1.58	-1.49	-1.32	-1.53
1992	-0.64	-1.25	-1.78	-1.72	-1.45	-1.49	-1.52	-1.57	-1.60	-1.44	-1.23	-1.03	-1.39
1993	-0.91	-1.33	-1.63	-1.56	-1.37	-1.52	-1.62	-1.61	-1.63	-1.63	-1.49	-1.24	-1.46
1994	-0.73	-1.16	-1.67	-1.61	-1.51	-1.58	-1.62	-1.66	-1.63	-1.48	-1.20	-0.64	-1.37
1995	-0.43	-1.00	-1.51	-1.59	-1.39	-1.44	-1.44	-1.56	-1.46	-1.32	-1.10	-0.66	-1.24
1996	-0.29	-0.29	-0.39	-0.71	-0.98	-0.93	-1.10	-1.28	-0.94	-0.97	-0.97	-0.40	-0.77
1997	-0.32			-1.22	-1.00	-1.10	-1.18	-1.27	-1.25	-1.18	-1.12	-0.79	-1.04
1998	-0.31		-0.63	-0.92	-1.09	-1.06	-1.28	-1.40	-1.30	-0.95	-0.97	-0.69	-0.96
1999	-0.19		-0.69	-0.60	-0.92	-1.06	-1.30	-1.25	-1.13	-1.06	-0.77	-0.44	-0.86

MONTHLY AVERAGE 175 METER TEMPERATURES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												-0.90	-0.90
1947			-1.32			-1.05	-0.99		-0.48	-0.28	-0.18		-0.72
1948			-1.48	-1.16	-1.12	-1.19	-1.08	-0.96					-1.17
1949						-0.90	-0.84	-0.87	-1.08	-1.13		-0.95	-0.96
1950	-0.57		-1.46	-1.54			-1.53	-1.51	-1.53		-1.35	-1.37	-1.36
1951		-0.51	-0.50	-0.75	-0.75	-0.77	-0.80	-1.03	-0.95	-0.83			-0.77
1952	-0.75			-0.35	-0.13	-0.38	-0.86	-0.99	-1.10	-1.36		-0.96	-0.76
1953		-0.16		-0.02	-0.47	-0.94	-1.14	-1.12	-0.99	-0.99	-1.16	-0.69	-0.77
1954	-0.25	-0.27	-0.41		-0.94	-0.81	-0.99	-1.30	-1.36	-1.14	-1.08	-0.90	-0.86
1955	-0.46	-0.25		-0.66	-0.67	-0.86	-1.12	-1.16	-1.08	-1.02	-0.99	-0.80	-0.82
1956	-0.44	0.05	-0.20	-0.62	-1.09	-1.02	-1.14	-1.25	-1.06	-0.92	-1.02	-0.99	-0.81
1957		-0.83	-1.16	-0.97	-1.16	-1.15	-1.29	-1.14	-1.13	-0.89	-0.97	-0.93	-1.06
1958	-0.78	-0.68	-0.60	-0.63	-0.60	-0.55	-0.74	-0.90	-0.83	-0.64	-0.93		-0.72
1959	-0.05	-0.96	-1.26	-1.24	-1.44	-1.45	-1.46	-1.40	-1.34	-1.30	-1.33	-1.13	-1.20
1960	-0.86	-0.58	-0.65	-0.43	-0.30	-0.38	-0.66	-1.03	-0.79	-0.85	-0.79	-0.87	-0.68
1961	-0.63	-0.87	-1.06		-1.32	-1.23	-1.17	-1.26	-1.15	-1.06	-0.93		-1.07
1962	0.21	0.17	-0.75	-0.75	-0.94	-0.89	-0.80	-0.92	-1.05	-0.60	-0.64		-0.63
1963	-0.51	-0.33	-0.52	-1.07	-1.00	-0.60	-0.65	-1.02	-1.04	-1.08	-0.90	-0.56	-0.77
1964	-0.10	-0.72	-0.91	-1.27	-1.41	-1.31	-1.30	-1.31	-1.29	-1.22	-0.86	-0.79	-1.04
1965	-0.50	-0.53	-0.62	-0.89	-1.19	-1.03	-0.74	-0.82	-0.91	-0.52	-0.68	-0.27	-0.73
1966		0.26	0.31	-0.16	-0.35	0.25	0.26	0.20	0.40	0.47	-0.03	-0.17	0.13
1967	0.06	-0.20	-0.36	-0.99	-0.91	-1.15	-1.23	-1.34	-1.12	-0.69	-0.70	-0.47	-0.76
1968	0.11	0.11	0.02	0.10	0.15	-0.55	-0.33	-0.53	-0.78	-0.73	-0.91	-0.86	-0.35
1969	-0.78	-0.34	-0.37	-0.41	-0.35	-0.31	-0.56	-0.43	-0.55	-0.68	-0.74	-0.77	-0.52
1970	-0.49	-0.57	-0.49	-0.39	-0.27	-0.40	-0.18	-0.73		-0.75	-0.97	-1.07	-0.57
1971	-0.79	-0.54	-0.37	-0.63	-0.88	-1.00	-1.16	-1.06	-0.80	-1.08	-0.90	-0.78	-0.83
1972	-0.53	-0.56	-0.89	-1.28	-1.17	-1.39	-1.41	-1.50	-1.56	-1.47	-1.39		-1.20
1973	-1.36	-1.47	-1.45	-1.53	-1.53	-1.59	-1.54	-1.62	-1.47	-1.49	-1.25	-1.22	-1.46
1974	-0.99	-1.31	-1.47	-1.59	-1.51	-1.53	-1.65	-1.63	-1.49	-1.45	-1.48		-1.46
1975	-0.88	-0.93		-0.71	-1.41	-1.36	-1.36	-1.20	-0.73	-0.84	-0.72	-0.39	-0.96
1976	-0.01	-0.17	-0.60	-0.72	-0.83	-0.79	-1.03	-1.21	-1.32	-1.38	-1.32	-1.06	-0.87
1977	-0.82	-0.81	-0.84	-0.88	-1.00	-0.96	-1.08	-1.43	-1.30	-1.10	-1.13	-0.64	-1.00
1978	-0.99	-0.36	-0.55	-0.72	-0.42	-0.94	-1.15		-0.78		-0.58		-0.72
1979	-0.19	-0.37	-0.39	-0.42	-0.90	-0.83	-1.12	-1.02	-0.84	-0.50	-0.75	-0.69	-0.67
1980	-0.33		-0.58	-0.75	-0.86	-0.62	-1.07	-0.77	-0.54			-0.91	-0.71
1981	-0.80		-0.70	-0.64	-0.79	-0.85	-0.80		-0.77	-0.91	-0.48	-0.33	-0.71
1982	-0.21	-0.55	-0.57	-0.77	-0.91	-1.20	-1.20		-1.00	-0.89	-1.13		-0.84
1983		-0.52		-1.28		-1.31	-1.39	-1.44	-1.43	-1.49	-1.51	-1.23	-1.29
1984	-1.29	-1.16		-1.28	-1.26	-1.22	-1.04	-1.32	-1.33	-1.33	-1.44	-1.25	-1.27
1985	-1.21	-1.55	-1.46	-1.56	-1.22	-1.58	-1.53	-1.60	-1.50	-1.51	-1.42	-1.01	-1.43
1986	-0.96	-0.85	-1.30	-1.44	-1.40	-1.26	-1.21	-0.90	-0.82	-0.68	-0.95	-0.92	-1.06
1987	-0.63	-0.58	-0.70	-1.04	-1.05	-1.14	-1.32	-1.27	-1.34	-1.17	-0.99	-0.97	-1.02
1988	-0.70			-1.22	-1.28	-1.09	-1.12	-1.18	-1.18	-1.14	-0.82	-0.94	-1.07
1989	-0.79	-0.63		-1.03	-1.01	-1.12	-1.23	-1.37	-1.38	-1.36	-1.25	-0.96	-1.10
1990	-0.67	-0.76	-1.12	-1.44	-1.52	-1.41	-1.37	-1.39	-1.41	-1.34	-1.26	-1.28	-1.25
1991		-1.23	-1.55	-1.36	-1.43	-1.53	-1.53	-1.58	-1.62	-1.51	-1.38	-1.36	-1.46
1992	-0.87	-1.13	-1.44	-1.66	-1.37	-1.38	-1.39	-1.33	-1.45	-1.27	-1.20	-1.12	-1.30
1993	-1.04	-1.18	-1.49	-1.34	-1.33	-1.45	-1.53	-1.56	-1.63	-1.63	-1.49	-1.42	-1.42
1994	-1.12	-1.12	-1.51	-1.51	-1.46	-1.52	-1.51	-1.49	-1.51	-1.30	-1.16	-1.13	-1.36
1995	-0.81	-0.91	-1.08	-1.22	-1.29	-1.33	-1.35	-1.44	-1.29	-1.10	-0.95	-0.83	-1.13
1996	-0.32	-0.20	-0.26	-0.53	-0.77	-0.70	-0.84	-0.98	-0.96	-0.95	-0.99	-0.49	-0.67
1997	-0.50			-0.75	-0.63	-0.84	-1.01	-1.12	-1.00	-0.78	-0.86	-0.87	-0.84
1998	-0.13		-0.42	-0.53	-0.76	-0.49	-0.83	-1.11	-0.91	-0.65	-0.72	-0.69	-0.66
1999	-0.37		-0.41		-0.39	-0.50	-0.77	-1.06	-1.00	-0.90	-0.50	-0.60	-0.65

Appendix A-2. Monthly statistical summaries for temperature at standard depths.

MONTHLY STATISTICAL SUMMARY FOR SURFACE TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	44	0.10	0.64	0.10	-1.64	1.16	-0.26	-0.02
FEB	40	-0.92	0.60	0.10	-1.71	0.25	0.46	-1.07
MAR	40	-0.98	0.60	0.09	-1.67	0.22	0.61	-0.90
APR	48	-0.17	0.67	0.10	-1.35	1.56	0.48	-0.11
MAY	51	1.66	1.04	0.15	-0.46	3.69	-0.06	-0.78
JUN	53	5.26	1.21	0.17	2.32	7.41	-0.24	-0.62
JUL	53	9.74	1.08	0.15	7.38	12.43	-0.07	-0.25
AUG	48	12.57	1.30	0.19	10.43	15.53	0.40	-0.96
SEP	51	11.59	0.86	0.12	9.66	13.49	0.13	-0.28
OCT	51	8.80	0.80	0.11	6.93	11.20	1.07	2.25
NOV	49	5.27	0.76	0.11	3.46	7.57	0.58	1.68
DEC	45	2.30	0.59	0.09	0.95	3.83	0.35	0.56

MONTHLY STATISTICAL SUMMARY FOR 10 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	39	0.06	0.67	0.11	-1.72	1.19	-0.35	-0.07
FEB	34	-1.17	0.49	0.08	-1.74	-0.06	0.77	-0.47
MAR	35	-1.19	0.50	0.09	-1.70	-0.06	0.98	-0.25
APR	37	-0.39	0.61	0.10	-1.57	1.37	0.63	0.73
MAY	41	1.36	0.96	0.15	-0.59	3.27	0.01	-0.51
JUN	42	4.76	1.15	0.18	1.99	7.10	-0.30	-0.22
JUL	41	9.07	1.25	0.20	6.78	12.19	-0.03	-0.22
AUG	39	11.92	1.46	0.23	8.27	15.16	0.02	0.06
SEP	39	11.42	0.89	0.14	9.64	13.24	0.08	-0.68
OCT	40	8.82	0.75	0.12	7.80	11.05	1.50	2.35
NOV	41	5.19	0.83	0.13	2.94	7.29	0.09	1.34
DEC	35	2.25	0.58	0.10	0.92	3.82	0.42	1.00

MONTHLY STATISTICAL SUMMARY FOR 20 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	39	0.03	0.66	0.11	-1.76	1.16	-0.35	0.18
FEB	36	-1.16	0.51	0.09	-1.74	-0.04	0.82	-0.44
MAR	35	-1.23	0.47	0.08	-1.71	-0.09	0.94	-0.27
APR	39	-0.64	0.51	0.08	-1.55	0.35	0.17	-0.89
MAY	42	0.91	0.91	0.14	-1.14	2.62	-0.29	-0.26
JUN	42	3.33	1.36	0.21	-0.30	5.50	-0.86	0.65
JUL	41	5.85	1.79	0.28	1.31	10.28	0.08	0.55
AUG	40	8.20	2.02	0.32	2.87	12.42	-0.66	0.35
SEP	40	10.38	1.28	0.20	7.13	12.64	-0.33	0.19
OCT	42	8.49	0.78	0.12	6.82	10.68	0.72	1.29
NOV	40	5.05	0.87	0.14	2.86	7.03	-0.27	1.01
DEC	35	2.19	0.59	0.10	0.92	3.83	0.59	1.12

MONTHLY STATISTICAL SUMMARY FOR 30 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	47	0.06	0.64	0.09	-1.78	1.10	-0.43	0.31
FEB	41	-1.01	0.59	0.09	-1.75	0.13	0.41	-1.21
MAR	43	-1.19	0.51	0.08	-1.72	-0.03	0.84	-0.57
APR	46	-0.67	0.56	0.08	-1.61	0.83	0.41	0.06
MAY	50	0.38	0.71	0.10	-1.21	1.71	-0.59	0.11
JUN	54	2.00	1.38	0.19	-0.84	5.97	-0.08	0.24
JUL	53	3.11	1.85	0.25	-0.36	7.75	0.61	0.16
AUG	50	3.95	2.18	0.31	0.01	11.58	1.14	1.96
SEP	47	7.51	1.92	0.28	3.45	11.73	-0.27	-0.08
OCT	50	7.63	1.31	0.19	4.40	10.24	-0.26	0.14
NOV	50	4.81	0.83	0.12	2.22	6.74	-0.36	1.54
DEC	45	2.11	0.59	0.09	0.89	3.73	0.57	0.64

MONTHLY STATISTICAL SUMMARY FOR 50 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	47	-0.05	0.61	0.09	-1.70	1.07	-0.47	0.14
FEB	42	-1.07	0.56	0.09	-1.74	0.12	0.57	-0.99
MAR	42	-1.27	0.46	0.07	-1.75	-0.12	1.00	0.09
APR	48	-0.96	0.48	0.07	-1.70	0.30	0.57	-0.43
MAY	51	-0.56	0.55	0.08	-1.61	0.80	0.17	0.02
JUN	54	-0.28	0.80	0.11	-1.53	1.59	0.65	-0.20
JUL	53	-0.17	0.93	0.13	-1.44	2.23	0.86	0.08
AUG	51	0.14	0.79	0.11	-1.13	2.02	0.73	-0.08
SEP	49	2.07	1.53	0.22	-0.30	6.28	0.56	-0.11
OCT	47	4.23	1.84	0.27	-0.25	7.96	-0.19	-0.45
NOV	50	3.89	0.87	0.12	1.06	5.94	-0.12	1.72
DEC	45	1.82	0.53	0.08	0.44	3.14	-0.04	0.82

MONTHLY STATISTICAL SUMMARY FOR 75 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	47	-0.14	0.58	0.08	-1.72	1.05	-0.37	0.58
FEB	43	-1.08	0.52	0.08	-1.74	-0.09	0.40	-1.21
MAR	43	-1.36	0.38	0.06	-1.80	-0.38	0.94	-0.06
APR	47	-1.22	0.35	0.05	-1.74	-0.23	0.73	0.07
MAY	51	-1.08	0.38	0.05	-1.75	-0.18	0.42	-0.44
JUN	53	-1.08	0.46	0.06	-1.72	0.67	1.53	3.25
JUL	51	-1.08	0.45	0.06	-1.63	0.34	1.58	2.74
AUG	50	-0.96	0.44	0.06	-1.55	0.49	1.25	1.82
SEP	49	-0.23	0.62	0.09	-1.09	2.00	1.10	2.21
OCT	48	0.62	0.94	0.14	-1.39	3.21	0.49	0.26
NOV	48	1.92	1.01	0.15	-0.34	5.06	0.42	0.82
DEC	44	1.33	0.43	0.06	0.15	2.36	-0.27	1.12

MONTHLY STATISTICAL SUMMARY FOR 100 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	47	-0.18	0.55	0.08	-1.70	0.95	-0.30	0.60
FEB	43	-1.02	0.51	0.08	-1.74	-0.15	0.23	-1.34
MAR	42	-1.36	0.40	0.06	-1.81	-0.37	0.88	-0.41
APR	48	-1.35	0.35	0.05	-1.75	-0.30	1.35	1.25
MAY	51	-1.32	0.25	0.04	-1.75	-0.69	0.75	0.12
JUN	54	-1.34	0.24	0.03	-1.72	-0.66	0.88	0.49
JUL	52	-1.35	0.23	0.03	-1.68	-0.77	0.76	0.13
AUG	51	-1.29	0.25	0.04	-1.66	-0.66	0.57	-0.28
SEP	51	-1.03	0.38	0.05	-1.54	0.41	1.42	2.93
OCT	48	-0.74	0.45	0.06	-1.53	0.36	0.37	-0.54
NOV	48	0.15	0.75	0.11	-1.27	1.72	0.24	-0.88
DEC	45	0.74	0.41	0.06	-0.52	1.71	-0.44	1.80

MONTHLY STATISTICAL SUMMARY FOR 125 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	33	-0.34	0.53	0.09	-1.67	0.87	0.09	1.06
FEB	30	-0.96	0.49	0.09	-1.70	-0.03	0.23	-1.06
MAR	29	-1.28	0.44	0.08	-1.80	-0.38	0.63	-0.86
APR	35	-1.38	0.36	0.06	-1.74	-0.22	1.75	2.95
MAY	36	-1.38	0.21	0.04	-1.68	-0.78	1.01	0.76
JUN	36	-1.41	0.20	0.03	-1.68	-0.85	1.11	1.03
JUL	36	-1.44	0.21	0.04	-1.70	-0.71	1.37	2.50
AUG	34	-1.44	0.21	0.04	-1.73	-0.82	1.15	1.54
SEP	37	-1.31	0.30	0.05	-1.63	-0.43	1.23	1.21
OCT	35	-1.19	0.32	0.05	-1.61	-0.43	0.68	-0.21
NOV	36	-0.85	0.43	0.07	-1.47	0.34	0.89	0.58
DEC	32	-0.08	0.48	0.08	-1.04	0.82	-0.11	-0.57

MONTHLY STATISTICAL SUMMARY FOR 150 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	47	-0.43	0.41	0.06	-1.49	0.54	0.17	0.42
FEB	42	-0.72	0.45	0.07	-1.64	0.12	-0.05	-0.65
MAR	42	-1.06	0.46	0.07	-1.78	-0.08	0.32	-0.90
APR	48	-1.15	0.39	0.06	-1.72	-0.23	0.54	-0.77
MAY	51	-1.18	0.32	0.04	-1.58	-0.25	0.91	0.31
JUN	52	-1.23	0.28	0.04	-1.65	-0.45	0.76	0.18
JUL	52	-1.29	0.27	0.04	-1.72	-0.36	1.43	3.32
AUG	51	-1.34	0.22	0.03	-1.69	-0.50	1.14	3.02
SEP	52	-1.25	0.29	0.04	-1.66	-0.04	1.49	4.69
OCT	50	-1.17	0.26	0.04	-1.63	-0.25	0.65	1.66
NOV	49	-1.06	0.29	0.04	-1.51	-0.04	1.07	2.82
DEC	44	-0.68	0.33	0.05	-1.32	0.14	0.34	-0.22

MONTHLY STATISTICAL SUMMARY FOR 175 METER TEMPERATURE

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	44	-0.59	0.38	0.06	-1.36	0.21	0.16	-0.53
FEB	42	-0.62	0.44	0.07	-1.55	0.26	-0.09	-0.39
MAR	43	-0.81	0.48	0.07	-1.55	0.31	-0.01	-0.83
APR	48	-0.92	0.44	0.06	-1.66	0.10	0.20	-0.68
MAY	49	-0.95	0.41	0.06	-1.53	0.15	0.61	-0.27
JUN	52	-0.99	0.39	0.05	-1.59	0.25	0.67	0.47
JUL	53	-1.07	0.37	0.05	-1.65	0.26	1.17	2.32
AUG	49	-1.15	0.34	0.05	-1.63	0.20	1.44	4.05
SEP	51	-1.09	0.36	0.05	-1.63	0.40	1.33	4.12
OCT	49	-1.01	0.38	0.06	-1.63	0.47	1.16	3.18
NOV	48	-0.98	0.33	0.05	-1.51	-0.03	0.58	0.54
DEC	44	-0.88	0.29	0.04	-1.42	-0.17	0.38	-0.05

Appendix A-3. Monthly average temperature anomalies by year at standard depths.

MONTHLY AVERAGE SURFACE TEMPERATURE ANOMALIES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.48	-1.27	1.18	1.42	0.10	-0.99	-0.76	0.02
1947			0.01		-1.38	-0.99	0.67		-0.58	-1.18			-0.58
1948				-0.81	-0.48	1.35	-0.42						-0.09
1949						-0.12		-0.51	-0.89			0.23	-0.32
1950			-0.36	0.01		-0.25	-0.87	-0.59	-0.38		0.19	1.16	-0.14
1951	-0.14	0.40	0.82	1.24	1.12	1.72	1.31	-1.27	-0.46	0.53			0.53
1952	0.10			0.66	1.00	0.73	0.07	1.75	-0.08	0.42		0.38	0.56
1953		0.99		0.29	0.58		0.50	-1.19	-0.38	0.16	0.14	0.02	0.12
1954	-0.37	-0.06	0.61	-0.51	-1.19	-0.86	-0.07	-1.01	-1.34	-1.11	-0.87	-0.02	-0.57
1955	0.74	0.92		-1.06	-2.14	-1.85	-1.51	-1.71	-1.60	-2.06	-0.49	-0.11	-0.99
1956	0.94	1.01	0.53	-0.28	-0.75	-0.70	-0.78	-1.18	-0.87	-0.72	0.41	0.56	-0.15
1957	-0.46	-0.68	-0.65	-0.94	-1.78	-1.94	0.14	-2.04		-1.25	0.00	-0.52	-0.92
1958	0.41	1.07	1.09	1.20	0.91	0.62	0.51	-0.79	-0.61	-0.77	-0.49	-0.81	0.20
1959	-0.49	-0.44	-0.58	-0.77	-0.66	-1.58	-1.25	0.43	-0.11	-0.54	-0.35	0.04	-0.53
1960	-0.41		0.45	-0.10	-0.36	0.92	-0.06	0.59	0.97	0.03	-0.02	-0.39	0.15
1961	-0.13		-0.25		-1.48	0.05	0.81	1.29	-0.34	2.21	1.82		0.44
1962	1.18	0.34	0.14		0.23	-1.01	-0.72	-0.92	-1.29	0.19	0.64		-0.12
1963	1.10	0.66	-0.03	-0.42	-0.57	-0.44	0.49	-0.33	-1.04	-0.47	0.45	-0.56	-0.10
1964	-0.15	-0.27	-0.37	-0.47	-1.48	0.18	-1.63	-1.78	-0.83	-0.41	-0.51	-0.13	-0.65
1965		-0.20	-0.03	0.21	-0.71	-0.29	-0.71	-1.10	-0.12	-0.37	-0.40	0.27	-0.31
1966		0.81	0.76	0.35	-0.01	0.73	-0.32	-1.11	-1.15	-0.76	-0.13	0.88	0.00
1967	1.12	0.26	-0.31	-1.27	-1.82	-0.68	1.19	2.59	1.27	1.91	2.13	1.18	0.63
1968	0.97	1.25	0.70	0.33	-0.28	-1.28	-1.51	-1.86	-1.20	-0.26	0.33	0.60	-0.18
1969	0.52	0.87	1.34	0.67	0.41	0.57	-1.41	-1.65	-0.28	-0.71	-0.07	1.50	0.15
1970	0.80	1.06	1.28	0.49	1.29	0.71	1.70	1.04		0.00	1.23	0.15	0.89
1971	-0.65	-0.04	0.51	0.99	1.41	2.11	1.22	1.14	-0.16	-0.45	-0.44	-0.19	0.45
1972	-0.33	-0.41	-0.12	-0.74	-0.51	-0.51	-0.79	-1.83	-1.58	-0.27	-0.92		-0.73
1973	-1.34	-0.49	-0.33	-0.87	-1.53	-0.61	0.61	-0.75	-0.15	0.31	-0.10	0.39	-0.41
1974	-0.11	-0.25	0.05	-0.07	-0.49	-1.99	-2.23	-1.65	0.42	-0.16	-0.67		-0.65
1975	-0.37				-1.06	-2.34	0.42	0.67	-0.08	-0.81	-0.91	-0.41	-0.54
1976	0.27	0.16	0.01	0.19	1.01	-0.25	-0.41		0.64	-0.62	-1.88	-0.69	-0.14
1977	-0.28	-0.46	-0.18	0.09	0.76	0.83	-0.70	-1.53	-1.25	-0.59	0.12	-0.56	-0.31
1978	0.14	0.49		-0.11	0.66	-1.37	-0.40		-1.45	-1.15	-1.65		-0.54
1979	0.57	0.45	0.21	0.18	-0.33	1.43	1.42	1.58	0.23	0.03	-0.01	-0.02	0.48
1980	-0.47		-0.26	0.09	0.27	0.20	-0.82	-0.78	-1.70	-0.69	-1.30	0.11	-0.49
1981	-0.30		1.08	0.25	1.80	1.58	1.26		0.22	-0.19	0.28	1.12	0.71
1982	0.78	0.05	-0.23	-0.19	0.46	0.24	-0.72		0.35	0.11	0.27		0.11
1983		-0.07		1.11	0.70	0.60	0.95	-0.17	0.74	0.98	0.64	0.11	0.56
1984	-0.35	-0.28		-0.88	-2.03	-1.79	0.41	0.91	0.39	0.10	-0.62	-0.22	-0.40
1985	-1.04	-0.58	-0.52	-0.60	-1.22	-0.78	0.05	-1.32	-0.51	-0.01	-1.04	-1.43	-0.75
1986	-0.52	-0.46	-0.50	-0.19	0.56	0.57	0.10	0.33	-0.41	-1.00	-0.60	-0.97	-0.26
1987	-0.84	-0.61	-0.75	-1.23	0.02	0.87	1.06	0.75	-0.97	0.41	0.23	-0.63	-0.14
1988	-0.24	-0.32		-0.14	0.47	-0.06	-0.32	1.07	0.92	1.00	-0.35	-0.04	0.18
1989	-0.19	-0.27		-0.13	0.33	1.34	0.41	-0.16	-0.55	-0.34	-0.78	-0.86	-0.11
1990	-0.40	-0.54	-0.31	-0.32	-0.90	-1.13	-0.18	0.35	0.50	2.03	0.07	0.23	-0.05
1991		-0.54	-0.55	-1.10	-2.30	-2.97	-2.51	-2.49	-2.30	-0.34	0.20	-0.38	-1.39
1992	-0.64	-0.67		-0.59	-0.66	0.06	-1.92	-1.58	-1.05	-0.83	-0.76	-0.33	-0.82
1993	-1.09	-0.70	-0.55	-0.80	-0.65	-1.49	-1.96	-1.11	-1.20	-0.31	0.02	0.23	-0.80
1994	-0.41	-0.68	-0.36	-0.31	-0.34	-0.34	1.09	1.89	1.19	-0.89	0.13	0.06	0.09
1995	0.27	-0.17	-0.62	-0.77	-1.13	-0.33	-0.35	-1.25	-0.77	0.05	-0.04	0.34	-0.40
1996	0.32	0.38	0.47	0.17	0.33	0.12	-1.03	0.22	0.08	-0.47	0.12	0.41	0.09
1997	0.62			-0.45	-1.24	-1.27	-0.51	0.01	-0.62	0.36	0.32	0.09	-0.27
1998	0.24		0.61	0.48	1.14	1.06	0.84	1.04	-1.03	-0.26	0.13	-0.03	0.38
1999	0.20		1.10	1.08	1.65	1.70	2.53	1.89	0.80	-0.51	-0.77	-0.49	0.83

MONTHLY AVERAGE 10 METER TEMPERATURE ANOMALIES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						-0.45							-0.45
1959	-0.38	-0.38	-0.45	-0.35	-0.58	-1.57	-0.84	0.85	0.08	-0.58	-0.92	-0.16	-0.44
1960	-0.21		0.56	0.01	-0.22	0.81	0.27	-0.55	1.24	0.31	-0.11	-0.38	0.16
1961	-0.16	-0.48	-0.41		-1.37	0.36	1.32	0.99	-0.45	1.81	1.81		0.34
1962	1.09	0.31	-0.16		0.15	-0.78	-0.81	-0.85	-0.89	-0.14	0.77		-0.13
1963	0.98	0.71	0.03	-0.25	-0.25	0.15	0.30	-0.08	-1.01	-0.61	0.39	-0.06	0.03
1964	-0.08	-0.04	-0.33	-0.47	-1.31	-0.13	-1.32	-1.36	-0.77	-0.49	-0.69	-0.12	-0.59
1965	0.25	-0.23	-0.04	-0.18	-0.27	-0.09	-0.41	-0.33		-0.35	-0.50	0.26	-0.17
1966		0.88	0.57	0.35	-0.16	0.20	0.29	-0.55	-0.91	-0.79	0.12	0.86	0.08
1967	1.11	0.24	-0.41	-1.22	-1.58	-0.26	1.75	3.10	1.54	1.91	1.97	1.05	0.77
1968	1.01	1.04	0.63	0.58	0.00	-1.12	-1.24	-1.61	-1.11	-0.15	0.38	0.45	-0.10
1969	0.34	0.99	1.17	0.80	0.55	0.76	-0.92	-0.97	-0.54	-0.86	-0.37	1.48	0.20
1970	0.91	0.98	1.17	0.51	0.96	0.95	1.12	0.97		-0.10	1.21	0.16	0.80
1971	-0.66	-0.19	0.27	0.86	1.56	2.31	1.15	1.60	0.19	-0.46	-0.41	-0.17	0.50
1972	-0.43	-0.55	-0.26	-0.64	-0.54	-0.19	-0.41	-1.41	-1.50	-0.29	-0.90		-0.65
1973	-1.43	-0.58	-0.45	-0.86	-1.33	-1.00	1.08	0.07	0.22	0.49	-0.14	-0.13	-0.34
1974	-0.75	-0.62	-0.27	-0.28	-0.32	-1.87	-1.93	-1.09	0.53	-0.10	-0.55		-0.66
1975	-0.22	-0.37			-0.85	-1.99	0.60	1.06	-0.78	-0.86	-0.73	-0.50	-0.46
1976	0.12	-0.19	-0.12	0.07	0.33	-0.14	-2.32	-0.86	0.61	-0.52	-1.66	-0.71	-0.45
1977	-0.51	-0.47	-0.08	0.19	0.95	1.15	-0.54	-1.03	-1.05	-0.67	0.03	-0.61	-0.22
1978	0.03	0.48	0.20	0.02	0.57	-1.11	-0.12	1.82	-0.84	-1.10	-1.03		-0.10
1979	0.42	0.08	0.01		-1.23	-0.41	1.43	1.76	0.64	-0.47	0.08	-0.09	0.20
1980	-0.04		-0.26	0.03	0.45	0.32	-0.51	-2.29	-2.01		-1.41	0.01	-0.57
1981	0.09		0.54	0.56	1.78	1.62	1.51		0.08	-0.23	0.34	1.03	0.73
1982	0.74	0.16	-0.15	-0.11	0.82	0.77	-0.81		0.43	0.35	0.40		0.26
1983		0.12		1.27	0.95	1.00	1.04	-0.14	0.46	0.53	0.65	0.09	0.60
1984	-0.48	-0.18		-0.80	-1.96	-2.22	0.24	-1.70	0.42	0.17	-0.59	-0.33	-0.68
1985	-1.07	-0.52	-0.41	-0.56	-1.04	-1.04	-0.45	-2.26	-0.25	0.04	-1.02	-1.45	-0.84
1986	-0.55	-0.39	-0.42	-0.16	0.77	1.08	0.82	0.77	-0.21	-0.98	-0.54	-1.00	-0.07
1987	-0.81	-0.54	-0.23	-0.55	-0.04	0.21	0.71	0.84	-0.63	0.45	0.29	-0.63	-0.08
1988	-0.30	-0.21		0.07	0.47	-0.12	-2.40	-0.63	1.08	1.05	-0.83	0.08	-0.16
1989	-0.17	-0.13		0.01	0.21	1.48	1.18	0.34	-0.61	-0.50	-0.63	-0.85	0.03
1990	-0.51	-0.52	-0.34	-0.10	-0.74	-0.64	0.22	0.29	0.49	2.11	0.22	0.07	0.05
1991		-0.44	-0.45	-0.88	-2.00	-2.80	-2.28	-3.78	-1.98	-0.23	0.33	-0.44	-1.36
1992	-0.68	-0.54	-0.43	-0.48	-0.37	-0.06	-1.51	-0.84	-0.97	-0.78	-0.65	-0.45	-0.65
1993	-1.17	-0.63	-0.47	-0.57	-0.44	-1.14	-1.83	-1.23	-1.44	-0.24	0.07	0.16	-0.74
1994	-0.44	-0.60	-0.37	-0.01	0.13	-0.03	1.75	2.32	0.93	-0.05	0.24	0.11	0.33
1995	0.17	-0.08	-0.47	-0.68	-0.98	-0.23	0.00	-0.55	-0.63	0.08	0.07	0.36	-0.25
1996	0.29	0.48	0.59	0.42	0.65	0.50	-0.47	0.34	0.37	-0.38	0.24	0.39	0.29
1997	0.59			-0.20	-0.97	-1.44	-0.33	0.61	-0.29	0.49	0.43	0.05	-0.11
1998	0.18		0.67	0.72	1.24	1.18	1.08	1.41	-1.23	-0.23	0.24	-0.05	0.47
1999	0.14		0.87	1.10	1.83	1.93	3.10	2.52	1.05	-0.44	-0.71	-0.49	0.99

MONTHLY AVERAGE 20 METER TEMPERATURE ANOMALIES (^{O}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										0.13			0.13
1954		-0.31		-0.28									-0.30
1955					-1.48			-0.70					-1.09
1956										-0.04			-0.04
1957		-0.54		-0.48		-2.93							-1.32
1958									0.63				0.63
1959	-0.30	-0.29	-0.47	-0.22	-0.16	-0.62	-1.15	0.13	1.10	-0.57	-0.60	-0.18	-0.28
1960	-0.43		0.44	0.20	-0.30	1.09	-1.16	-0.09	2.19	0.30		-0.60	0.16
1961	-0.25	-0.34	-0.49		-1.24	-1.71	1.04	-0.80	0.03	1.54	1.97		-0.03
1962	1.05	0.41	-0.23		0.46	0.18	-2.20	-3.45	0.07	-0.23	0.91		-0.30
1963	0.87	0.83	0.03	-0.28	-0.50	0.05	3.31	2.26	-0.11	-0.63	0.61	-0.13	0.53
1964	-0.17	-0.02	-0.33	-0.31	-0.81	-1.16	-1.26	0.42	-0.50	-0.61	-0.72	-0.23	-0.48
1965	0.19	-0.14	-0.13	-0.08	-0.09	0.44	-0.56	-1.63	-3.12	-0.80	-0.14	0.17	-0.49
1966		0.98	0.39	0.49	-0.23	0.56	-0.75	-3.00	-0.61	-1.22	0.20	0.70	-0.23
1967	1.01	0.20	-0.31	-0.99	-1.63	-0.16	-0.49	0.89	2.07	1.81	1.88	0.93	0.43
1968	0.93	1.12	0.56	0.53	0.28	-0.70	1.72	-0.18	-0.62	-0.25	0.46	0.42	0.36
1969	0.29	1.10	1.08	0.84	0.89	-0.15	-0.76	1.56	0.71	-0.93	-0.11	1.46	0.50
1970	0.96	0.96	0.98	0.58	0.49	1.38	2.27	1.65		-0.32	1.08	0.04	0.92
1971	-0.67	-0.09	0.07	0.72	1.62	1.95	0.79	1.61	0.93	-0.28	-0.18	-0.23	0.52
1972	-0.46	-0.45	-0.41	-0.54	-0.26	-0.43	1.38	1.04	-0.74	-0.33	-0.59		-0.16
1973	-1.46	-0.52	-0.50	-0.77	-1.48	-2.31	-0.98	1.10	1.19	0.46	0.02	-0.06	-0.44
1974	-0.69	-0.52	-0.41	-0.24	0.01	-0.89	0.05	-1.24	-0.98	-0.29	-0.40		-0.51
1975	-0.18	-0.32			-0.79	-0.83	-0.54	-1.58		-1.01	-0.75	-0.46	-0.72
1976	0.11		-0.06	0.15	0.31	0.50	-1.20	0.37	1.31	-0.50	-1.40	-0.67	-0.10
1977	-0.58	-0.37	-0.11	0.31	0.59	0.36	-0.49	1.71	-0.58	-0.67	-0.01	-0.55	-0.03
1978	0.03	0.57	0.17	-0.01	0.74	-0.98	2.38	4.25	0.02	-1.06	-0.86		0.48
1979	0.30	0.16	-0.09		-1.13	-2.50	-0.19	2.92	1.91	0.02	0.42	-0.16	0.15
1980	-0.23		-0.29	0.18	0.69	0.48	-2.10	-3.74	-0.93		-1.21	-0.32	-0.75
1981	-0.15		0.53	0.64	1.50	1.16	4.59		-0.03	-0.82	0.49	1.03	0.89
1982	0.64	0.25	-0.21	-0.09	0.72	1.63	-0.48		1.32	0.22	0.72		0.47
1983		0.15		-1.16	0.62	0.57	0.15	1.30	1.05	0.41	0.85	-0.03	0.39
1984	-0.46	-0.10		-0.65	-2.22	-3.91	-0.09	-2.26	-0.40	-0.11	-0.45	-0.51	-1.01
1985	-1.11	-0.38	-0.48	-0.51	-0.91	-0.90	-0.96	-0.57	0.46	0.00	-0.94	-1.39	-0.64
1986	-0.55	-0.28	-0.49	-0.46	0.57	1.31	3.08	-0.73	-0.73	-1.20	-0.32	-0.97	-0.06
1987	-0.73	-0.43	-0.26	-0.55	-0.12	0.47	1.36	1.81	-0.88	0.34	0.29	-0.60	0.06
1988	-0.33	-0.11		0.09	0.35	0.32	-3.35	-2.59	1.75	0.54	-2.04	0.04	-0.48
1989	-0.12	-0.08		0.17	0.13	1.39	1.72	-0.24	-0.16	-0.85	-0.36	-0.98	0.06
1990	-0.55	-0.44	-0.40	0.05	-0.37	-0.40	0.79	0.59	-1.98	1.27	0.38	-0.05	-0.09
1991		-0.34	-0.49	-0.78	-1.81	-2.49	-4.34	-5.41	-2.92	-1.29	0.57	-0.58	-1.81
1992	-0.73	-0.44	-0.44	-0.38	-0.09	0.32	1.00	-0.58	-1.24	-1.41	-0.40	-0.53	-0.41
1993	-1.24	-0.53	-0.53	-0.54	-0.45	-0.74	0.07	0.68	-1.04	-0.24	0.30	-0.05	-0.36
1994	-0.50	-0.49	-0.41	0.06	0.43	-0.20	3.18	1.19	1.63	-0.16	0.28	-0.09	0.41
1995	0.09	-0.03	-0.48	-0.58	-0.94	0.01	0.83	1.24	-1.30	-0.32	0.25	0.29	-0.08
1996	0.20	0.59	0.45	0.44	0.64	1.44	0.87	1.13	0.10	-0.51	0.39	0.31	0.50
1997	0.47			-0.08	-0.81	-1.48	-1.70	1.18	0.75	-0.05	0.66	-0.05	-0.11
1998	0.10		0.57	0.69	0.46	-0.25	0.35	-4.06	-1.45	-0.27	0.39	-0.15	-0.33
1999	-0.01		0.46	0.94	1.64	1.02	1.01	0.03	-0.34	-0.48	-0.70	-0.51	0.28

MONTHLY AVERAGE 30 METER TEMPERATURE ANOMALIES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.73	5.44	3.92	2.42	1.26	-0.35	-0.50	1.85
1947			-0.03		0.26	2.13	4.41			0.53	-0.07		1.21
1948			-0.19	-0.23	-0.21	0.46	1.67	1.12					0.44
1949						3.89		2.23	1.18			0.38	1.92
1950	0.12		-0.31	-0.06		1.96	3.60	1.45	0.13		0.46	1.12	0.94
1951	0.80	0.87	0.95	1.48	0.56	0.60	0.84	-1.21	3.11	1.87			0.99
1952	-0.25			0.49	1.03	0.18	0.61	-0.28		1.61		0.56	0.49
1953		1.24		0.16	0.57	1.53	3.40	4.00	2.79	1.23	0.83	0.08	1.58
1954	-0.32	0.27	1.03		0.22	0.91	0.51	-1.47		-1.31	-0.68	-0.87	-0.17
1955	0.53	0.97		-0.68		0.52	4.00	4.02	2.13	-1.46	-0.22	-0.07	0.97
1956	0.94	1.07	0.55	0.00	0.08	1.59	1.12	-2.38	-0.08	0.18	0.86	0.66	0.38
1957	-0.65		-0.23		-0.34	1.39	0.07	-2.21	-0.73	-0.22	-0.20	-0.58	-0.37
1958	0.38	1.24	1.18	1.26	1.39	2.71	5.57	8.00		0.05	-0.19	-0.79	1.89
1959	-0.53	-0.23	-0.40	0.00	0.53	0.55	0.12	-1.33	3.18	-0.21	-0.66	-0.11	0.08
1960	-0.17	0.69	0.52	0.26	-0.01	-0.80	-1.66	-1.22	1.81	-0.17	0.08	-0.54	-0.10
1961	-0.27	-0.29	-0.43		-1.14	-2.03	0.18	0.17	0.74	2.19	1.82		0.09
1962	1.03	0.46	-0.12		0.40	0.41	-1.14	-2.07	2.02	0.00	1.12		0.21
1963	0.82	0.91	0.08	-0.15	0.19	1.37	1.22		0.77	0.09	0.63	-0.04	0.54
1964	-0.18	-0.01	-0.31	-0.27	-0.78	-2.10	-0.04	1.36	1.40	-1.04	-0.72	-0.07	-0.23
1965	0.24	0.31	0.16	-0.11	0.39	1.65	-1.00	-0.69	-3.42	-0.65	-0.54	0.28	-0.28
1966		1.10	0.26	0.43	0.20	1.49	-0.26	-1.27	1.51	-1.79	0.03	0.75	0.22
1967	0.67	0.27	-0.36	-0.88	-1.44	-0.80	-0.78	0.09	-0.03	2.09	1.52	1.09	0.12
1968	0.97	1.23	0.61	0.57	0.54	0.80	3.34	0.48	0.61	0.35	0.58	0.51	0.88
1969	0.25	1.19	1.11	0.72	1.24	0.46	0.65	-0.24	-0.11	-0.59	-0.07	1.53	0.51
1970	0.94	1.00	0.71	0.59	0.02	1.31	3.62	4.29		0.28	1.14	0.07	1.27
1971	-0.72	-0.05	0.05	0.72	1.47	0.14	0.81	2.77	-0.23	-0.85	-0.23	-0.05	0.32
1972	-0.53	-0.40	-0.42	-0.57	-0.34	-1.68	0.58	-0.73	0.13	-0.58	-0.47		-0.46
1973	-1.52	-0.47	-0.47	-0.96	-1.50	-1.65	-0.52	2.44	3.71	1.29	-0.18	-0.09	0.01
1974	-0.68	-0.47	-0.36	-0.27	0.21	0.56	1.72	-1.48	-2.85	-0.57	-0.32		-0.41
1975	-0.29	-0.21			-0.22	0.41	0.70	0.09		-2.82	-0.70	-0.38	-0.38
1976	0.09	-0.04	-0.14	0.16	0.25	1.25	0.86	-0.99	0.07	0.00	-1.22	-0.53	-0.02
1977	-0.62	-0.40	-0.20	0.14	0.57	0.98	0.79	2.56	0.80	-0.27	-0.35	-0.38	0.30
1978	0.00	0.53	0.21	-0.05	0.79	-1.38	0.37	0.26	0.32	-2.95	-1.35		-0.30
1979	-0.32		0.00	0.42	-0.52	-1.93	-0.35	2.12	4.42	0.52	0.44	-0.15	0.42
1980	-0.22		-0.30	0.32	0.90	1.29	-1.30	-0.67	1.36		-1.07	-0.13	0.02
1981	0.02		0.45	0.60	0.81	-0.46	-1.91		-2.59	-0.30	0.35	1.16	-0.19
1982	0.57	0.33	-0.22	-0.14	0.42	1.95	-0.16		0.58	1.09	0.82		0.52
1983		0.16		-1.00	-0.17	-2.18	-1.22	0.64	1.27	0.94	0.96	0.05	-0.06
1984	-0.50	-0.02		-0.48	-1.44	-2.55	0.29	-1.32	-3.56	-1.78	-0.37	-0.87	-1.15
1985	-1.25	-0.37	-0.47	-0.53	-0.53	-1.52	-1.21	-0.48	1.88	0.44	-0.92	-1.27	-0.52
1986	-0.64	-0.22	-0.41	-0.53	0.65	1.23	2.44	-0.84	0.35	-0.69	-0.39	-0.75	0.02
1987	-0.64	-0.32	-0.19	-0.51	-0.60	1.08	1.66	1.29	-2.51	0.56	0.04	-0.46	-0.05
1988	-0.37	-0.09		0.05	0.38	-0.95	-1.86	-1.44	0.10	-1.11	-2.62	0.21	-0.70
1989	-0.09	-0.09		-0.09	0.14	0.14	1.81	-0.42	-3.03	-2.17	-0.48	-0.91	-0.47
1990	-0.59	-0.33	-0.40	0.04	0.27	0.44	1.28	-2.19	-3.80	0.68	-0.11	0.00	-0.39
1991		-0.27	-0.44	-0.75	-1.36	-1.62	-2.54	-3.64	-1.41	-3.66	0.62	-0.46	-1.41
1992	-0.74	-0.38	-0.39	-0.38	0.39	0.61	2.66	-0.21	-1.19	-2.43	-0.37	-0.39	-0.24
1993	-1.28	-0.46	-0.49	-0.54	-0.18	-0.11	1.95	0.36	-0.14	-1.41	0.19	-0.07	-0.18
1994	-0.52	-0.40	-0.34	0.02	0.74	-0.31	1.77	-0.12	0.76	-0.47	-0.08	-0.14	0.08
1995	0.07	0.02	-0.48	-0.85	-0.57	-0.33	1.07	0.28	-0.80	-1.77	0.10	0.37	-0.24
1996	0.16	0.62	0.37	0.36	0.74	1.75	3.06	1.43	1.50	-0.12	-0.32	0.37	0.83
1997	0.36			-0.15	-0.44	-0.52	-0.21	-1.17	-0.25	0.36	0.80	0.07	-0.12
1998	0.07		0.55	0.40	0.48	0.61	0.62	-2.85	-1.68	-0.77	0.20	-0.09	-0.22
1999	-0.14		0.75	0.92	0.80	0.62	0.17	0.20	-0.73	-0.85	-0.73	-0.43	0.05

MONTHLY AVERAGE 50 METER TEMPERATURE ANOMALIES (°C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						-0.60	2.49	1.93	0.82	2.98	-0.10	-0.13	1.06
1947			0.10		0.75	1.96	2.53		-0.20		-0.63		0.75
1948			-0.12	-0.10	-0.05	1.59	1.54	1.99					0.81
1949						1.65		0.12	0.25			-0.14	0.47
1950	0.00			-0.40		0.33	-0.51	-1.04	-1.87		0.14	0.59	-0.35
1951	0.62	0.62	0.62	1.28	0.31	-0.36	-0.43	-0.37		-2.95			-0.07
1952	-0.22			0.34	-0.03	0.44	-0.60	-0.93		-0.95		0.32	-0.20
1953		1.03		-0.48	-0.55	0.22	0.72	1.67	1.54	1.96	1.40	0.47	0.80
1954	-0.07	-0.04	0.24	0.09	0.30	0.26	-0.32	-0.43	-2.49	-1.39	0.18	-0.56	-0.35
1955	0.69	0.89		-0.50	-0.47	-0.24	-0.10	1.01	1.20	0.05	-0.75	-0.10	0.15
1956	0.53	0.88	0.74	0.46	0.04	-0.44	0.01	-0.88	-1.02	0.31	0.89	0.78	0.19
1957	-0.38	-0.51	-0.32	-0.22	-0.34	-0.58	-0.87	-0.84	-0.64	-1.17	-0.67	-0.34	-0.57
1958	0.60	1.25	1.28	0.87	0.11	-0.03	0.28	0.89	1.90	0.57	-0.15	-0.76	0.57
1959	-0.39	-0.36	-0.21	0.06	0.02	1.13	0.75	-0.28		0.11	-1.01	0.07	-0.01
1960	-0.02		0.69	0.34	0.05	-0.38	-0.62	-0.81	-1.72	-1.74	0.07	-0.52	-0.42
1961	-0.05	-0.35	-0.28		-0.34	-0.35	-0.21	0.50	0.72		1.67		0.15
1962	1.24	0.45	0.05		0.26	0.12	0.16	-0.20	-0.10	1.55	0.22		0.38
1963	0.98	0.85	0.21	-0.10	0.53	0.30	-0.24	0.91	0.16	1.18	-1.35	-0.09	0.28
1964	0.18	0.09	-0.19	-0.13	-0.29	-0.72	-0.46	-0.31	0.62	-0.10	-0.37	-0.12	-0.15
1965	0.29	0.26	0.36	-0.28	0.24	0.60	0.20	-0.33	0.84	1.46	-0.16	0.45	0.33
1966		0.95	0.38	0.57	0.47	0.81	0.11	-0.11	0.01	-0.27	0.29	0.86	0.37
1967	0.88	0.15	-0.16	-0.58	-1.03	-0.96	-1.05	-0.94	0.52	1.60	0.75	1.19	0.03
1968	1.22	1.00	0.54	0.32	1.38	1.85	1.78	1.67	2.33	3.39	1.35	0.49	1.44
1969	0.43	1.11	1.20	0.93	1.20	0.89	-0.06	-0.86	0.05	1.94	-0.28	0.36	0.58
1970	0.38	0.69	0.60	0.57	-0.08	-0.20	0.50	-0.46		2.28	0.88	0.18	0.49
1971	-0.62	-0.08	0.07	0.52	0.69	0.18	0.16	-0.01	-0.36	0.40	0.12	0.18	0.10
1972	-0.31	-0.48	-0.28	-0.42	-0.34	-0.86	-1.10	-0.81	-2.00	-3.26	-1.36		-1.02
1973	-1.25	-0.42	-0.24	-0.60	-0.99	-1.15	-0.75	0.43	2.35	1.32	-0.18	0.08	-0.12
1974	-0.59	-0.53	-0.24	-0.32	-0.29	0.61	0.82	-0.28	-2.51	-3.70	0.05		-0.63
1975	-0.18	-0.15			0.48	0.95	0.99	-0.06	-2.42	-2.04	-0.52	-0.55	-0.35
1976	-0.24	-0.25	-0.12	0.38	0.29	1.65	1.38	1.04	0.04	-0.12	-0.91	-0.23	0.24
1977	-0.40	-0.37	-0.14	-0.25	-0.05	-1.00	-0.97	-0.48	1.74	0.11	-0.32	-0.16	-0.19
1978	0.23	0.40	0.42	-0.19	-0.13	-0.91	-0.78	0.08	4.19		-0.91		0.24
1979	0.35	0.14	0.08	0.66	0.29	-0.36	-0.16	0.24	1.34	-0.12	0.07	-0.06	0.21
1980	0.24		0.06	0.57	0.36	0.86	-0.32	0.34	2.87		-1.00	0.11	0.41
1981	0.17		0.56	0.45	-0.09	-0.37	-0.38		-1.56	0.76	0.63	1.36	0.15
1982	0.72	0.28	-0.10	-0.24	0.08	0.43	-0.02		-0.14	-0.25	1.60		0.24
1983		0.07		-0.80	-0.91	-1.17	-0.90	-0.89	-1.31	1.09	1.33	0.11	-0.34
1984	-0.50	-0.27		-0.28	-0.77	-1.04	0.04	0.15	-1.70	-0.53	-0.07	-1.07	-0.55
1985	-1.17	-0.50	-0.31	-0.33	0.02	-0.61	-0.73	-0.26	-1.50	1.59	-0.60	-1.44	-0.49
1986	-0.58	-0.34	-0.28	-0.30	0.41	0.17	0.47	0.06	0.10	1.88	-0.10	-0.45	0.09
1987	-0.55	-0.41	-0.23	-0.60	-0.75	0.03	1.01	0.86	-1.43	-2.26	-0.10	-0.32	-0.40
1988	-0.22	-0.11		-0.19	-0.05	-0.42	-0.75	-0.03	-1.11	-2.51	-2.92	0.43	-0.72
1989	-0.09	-0.23		-0.38	-0.25	0.11	1.04	0.01	-0.27	-2.23	-0.81	-0.73	-0.35
1990	-0.41	-0.46	-0.22	-0.06	0.82	0.76	0.93	0.51	-1.34	0.16	-0.81	0.09	0.00
1991		-0.38	-0.25	-0.58	-0.87	-0.36	-1.00	-1.11	-0.29	-4.87	-0.73	-0.37	-0.98
1992	-0.50	-0.45	-0.28	-0.27	0.13	-0.19	1.35	-0.25	-2.25	-1.89	-0.01	-0.05	-0.39
1993	-1.15	-0.54	-0.30	-0.61	-0.07	-0.72	1.90	-0.25	-1.05	-1.86	-0.71	0.11	-0.44
1994	-0.26	-0.47	-0.23	0.22	0.99	-0.25	-0.31	-0.21	-1.04	-0.96	0.14	0.04	-0.20
1995	0.20	-0.13	-0.35	-0.72	-0.77	-0.38	0.03	0.03	-1.39	-2.94	-0.28	0.63	-0.51
1996	0.39	0.54	0.37	0.44	0.07	1.25	1.95	1.51	2.39	1.08	-0.41	0.54	0.84
1997	0.58			-0.05	-0.49	-0.32	-0.14	-0.40	-0.84	-2.45	-0.53	0.13	-0.45
1998	0.38		0.78	0.17	-0.01	-0.03	-0.74	-1.24	-2.04	-1.11	-0.14	-0.03	-0.36
1999	0.21		1.12	0.83	0.83	0.12	0.22	0.17	-0.20	-1.63	-0.68	-0.70	0.03

MONTHLY AVERAGE 75 METER TEMPERATURE ANOMALIES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			0.06		0.31	0.97	1.28						0.66
1948			-0.15	-0.09	-0.16	-0.08	0.72	1.49					0.29
1949						0.68		-0.05	-0.06			-0.07	0.13
1950	-0.01		-0.30	-0.30		-0.31	-0.41	-0.33	0.30		0.42	0.54	-0.04
1951	0.60	0.69	0.22	0.01	0.00	-0.07	0.06	0.25	1.03	0.13			0.29
1952	-0.10			0.14	-0.01	0.28	0.08	0.30		-0.58		-0.37	-0.03
1953		1.03		-0.01	-0.13	-0.15	0.08	0.99	1.20	0.14	1.62	0.29	0.51
1954	0.11	0.16	0.03	0.27	0.30	0.25	0.01	-0.03	-0.57	-0.02	1.12	-0.23	0.12
1955	0.85	0.87		-0.20	-0.19	-0.13	-0.03	0.03	0.29	1.17	0.73	-0.01	0.31
1956	0.43	0.87	0.67	0.53	0.11	-0.15	0.03	-0.16	-0.41	-0.37	0.19	-0.35	0.12
1957	-0.28	-0.48	-0.32	-0.05	-0.33	-0.49	-0.47	-0.55	-0.64	-1.28	-0.55	-0.35	-0.48
1958	0.53	1.02	0.91	0.48	0.15	-0.01	-0.25	-0.21	0.96	0.76	1.18	-0.56	0.41
1959	-0.31	-0.27	-0.20	0.19	0.16	0.11	0.07	0.01	0.38	-0.71	-1.22	-0.24	-0.17
1960	0.05	0.45	0.60	0.57	0.15	-0.21	-0.22	-0.37	-0.62	-0.73	-0.46	-0.61	-0.12
1961	-0.07	-0.34	-0.35		0.14	-0.20	-0.08	0.31	0.50	0.24	0.89		0.10
1962	0.96	0.42	-0.05		0.18	0.02	-0.11	-0.36	0.00	-0.13	-1.31		-0.04
1963	0.85	0.75	-0.05	0.08	0.21	-0.02	0.10	-0.05	0.33	-0.05	-0.91	-0.30	0.08
1964	0.12	0.07	-0.19	-0.04	0.07	-0.11	-0.17	-0.38	-0.34	-0.18	0.97	-0.07	-0.02
1965	0.22	0.26	0.17	-0.15	0.54	0.48	0.10	-0.13	0.42	0.27	0.08	0.17	0.20
1966		0.95	0.45	0.68	0.53	0.64	0.20	0.15	0.28	-0.40	0.21	0.16	0.35
1967	0.92	0.19	-0.18	-0.23	-0.56	-0.54	-0.55	-0.59	1.34	1.53	0.87	0.89	0.26
1968	1.27	0.85	0.38	0.31	0.78	1.74	1.30	0.88	0.48	-0.27	1.06	0.33	0.76
1969	0.35	0.99	0.99	1.04	0.92	0.53	0.06	-0.22	0.25	1.42	-0.35	-0.60	0.45
1970	0.08	0.65	0.45	0.61	0.04	0.02	-0.29	-0.58		-0.40	-0.92	-0.37	-0.06
1971	-0.43	0.02	0.07	0.02	-0.09	-0.21	0.23	0.35	0.05	2.39	0.02	-0.09	0.19
1972	-0.20	-0.38	-0.39	-0.33	-0.39	-0.30	-0.42	-0.47	-0.74	-1.39	-0.46		-0.50
1973	-1.17	-0.48	-0.32	-0.46	-0.65	-0.65	-0.18	-0.09	0.44	-0.68	-1.32	0.34	-0.44
1974	-0.35	-0.53	-0.34	-0.29	-0.28	-0.30	-0.45	-0.25	-0.58	-1.28	-1.50		-0.56
1975	0.01	-0.20			0.60	1.12	0.82	0.14	-0.41	0.89	0.46	-0.23	0.32
1976	0.03	-0.13	-0.30	-0.06	-0.08	0.55	1.41	0.24	0.80	0.33	0.44	-0.01	0.27
1977	-0.28	-0.21	-0.36	-0.37	-0.52	-0.44	-0.54	-0.22	0.65	-0.72	0.10	0.05	-0.24
1978	0.20	0.53	0.31	-0.17	-0.41	-0.61		-0.32	0.48	-1.29	-0.57		-0.19
1979	0.18	0.13	-0.10		0.69	0.08	0.08	-0.13	-0.10	-0.89	0.41	0.07	0.04
1980	0.25		-0.03	0.38	0.11	0.30	-0.17	-0.32	0.08		0.49	0.19	0.13
1981	0.09		0.38	0.47	0.01	0.03	-0.03		-0.10	0.35	1.63	0.68	0.35
1982	0.68	0.23	-0.21	-0.11	-0.18	0.01	-0.05		0.23	1.50	3.11		0.52
1983		0.16		-0.45	-0.48	-0.47	-0.42	-0.34	-0.10	-0.73	-0.33	0.04	-0.31
1984	-0.38	-0.43		-0.05	-0.38	-0.48	-0.17	-0.26	-0.52	-0.92	-0.11	-1.28	-0.45
1985	-1.21	-0.51	-0.39	-0.12	-0.04	-0.23	-0.37	-0.46	-0.01	-0.37	-0.19	-1.01	-0.41
1986	-0.64	-0.34	-0.33	-0.14	0.07	-0.38	-0.02	-0.36	0.17	1.17	0.89	-0.25	-0.01
1987	-0.39	-0.39	-0.30	-0.37	-0.43	-0.36	0.49	0.36	-0.15	-0.84	-0.68	-0.35	-0.28
1988	-0.03	-0.04		0.09	-0.25	0.07	-0.13	0.01	0.37	-0.26	-1.34	-0.03	-0.14
1989	-0.32	-0.22		-0.25	-0.33	-0.16	0.23	0.18	0.66	-0.13	0.30	-0.77	-0.07
1990	-0.35	-0.38	-0.31	0.11	0.58	0.34	0.37	0.45	0.27	-0.11	-0.82	-0.21	0.00
1991		-0.39	-0.32	-0.34	-0.52	-0.36	-0.54	-0.66	-0.72	-2.19	-2.32	-0.46	-0.80
1992	-0.48	-0.42	-0.30	-0.06	-0.07	-0.25	-0.26	-0.48	-0.76	-0.42	0.22	-0.22	-0.29
1993	-1.06	-0.51	-0.33	-0.30	-0.26	-0.52	-0.32	-0.58	-0.63	-0.79	-1.06	-0.04	-0.53
1994	-0.26	-0.42	-0.43	0.21	0.58	-0.23	-0.32	-0.47	-0.29	0.77	-0.52	-0.16	-0.13
1995	0.12	-0.18	-0.33	-0.46	-0.44	-0.37	-0.33	-0.27	0.03	-0.94	-0.40	0.32	-0.27
1996	0.40	0.39	0.37	0.60	0.23	0.36	0.49	0.76	2.34	0.82	0.62	0.40	0.65
1997	0.50			0.10	-0.12	-0.26	-0.16	-0.43	-0.19	-1.48	-1.11	-0.11	-0.33
1998	0.24		0.27	0.05	0.09	-0.29	-0.33	-0.60	-0.63	-1.72	-1.33	-0.45	-0.43
1999	0.19		0.59	0.53	0.67	0.25	0.24	0.06	-0.08	-0.67	0.20	-0.32	0.15

MONTHLY AVERAGE 100 METER TEMPERATURE ANOMALIES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						-0.13	-0.03	0.14	-0.07	0.48	0.61	0.02	0.15
1947			0.06		0.07	0.27	0.59		0.80	0.46			0.38
1948			-0.14	-0.27	-0.13	0.14	0.25	0.46					0.05
1949						0.02		0.15	-0.13			0.16	0.05
1950	-0.01			-0.22		-0.08	-0.13	-0.19	0.18		0.47	0.19	0.03
1951	0.36	0.54	0.27	0.41	0.19	0.13	0.07	0.29	0.78	0.74			0.38
1952	-0.17			0.31	0.45	0.33	0.12	0.39	0.15	0.02		-0.06	0.17
1953		1.00		0.30	0.39	-0.03	0.21	0.56		0.72	0.75	0.24	0.46
1954	0.22	0.13	-0.19	0.04	0.30	0.48	0.07	-0.09	-0.07	0.35	1.44	0.61	0.27
1955	0.95	0.87		0.08	0.13	0.05	0.19	0.10	-0.06		1.57	0.29	0.42
1956	0.51	0.86	0.68	0.30	0.22	0.05	0.12	0.02	-0.03	0.35	0.88	0.30	0.36
1957	-0.23	-0.41	-0.27	-0.19	-0.20	-0.28	-0.20	-0.11	-0.23	-0.29	0.64	-0.57	-0.20
1958	0.40	0.74	0.86	0.75	0.25	0.10	0.12	-0.25	-0.27	0.84	1.30	0.00	0.40
1959	-0.46	-0.16	-0.19	-0.12	0.11	0.12	0.16	0.14	0.31	-0.32	-0.24	0.05	-0.05
1960	-0.01	0.36	0.58	0.34	-0.02	-0.02	0.02	-0.11	-0.32	-0.31	-0.54	-0.16	-0.02
1961	-0.17	-0.32	-0.37		0.00	-0.01	0.11	0.18	0.04	0.58	0.20		0.02
1962	0.81	0.68	-0.03		0.10	0.28	0.19	-0.09	0.06	0.00	-0.59		0.14
1963	0.42	0.75	-0.13	-0.19	0.01	0.00	0.07	0.03	0.00	-0.01	-0.37	-0.27	0.03
1964	-0.07	-0.01	-0.18	-0.20	0.15	0.02	-0.01	-0.23	-0.29	-0.30	1.09	0.27	0.02
1965	0.07	0.29	0.27	-0.06	-0.03	-0.05	0.03	0.06	0.08	0.21	0.20	0.00	0.09
1966		0.98	0.67	0.71	0.66	0.66	0.59	0.51	0.44	0.34	-0.35	-0.06	0.47
1967	0.59	0.21	-0.23	-0.13	-0.24	-0.26	-0.19	-0.09	0.61	1.13	0.65	0.94	0.25
1968	1.00	0.96	0.50	0.15	0.34	0.55	0.37	0.27	0.11	0.23	-0.14	0.38	0.39
1969	0.33	0.97	0.99	1.06	0.69	0.31	0.32	0.05	-0.15	0.44	-0.22	-1.20	0.30
1970	-0.22	0.62	0.42	0.33	0.00	0.03	-0.04	-0.21		-0.43	-1.12	-0.43	-0.10
1971	-0.46	0.13	0.12	-0.17	-0.01	-0.23	0.00	0.11	-0.01		-0.25	0.05	-0.07
1972	-0.24	0.09	-0.36	-0.19	-0.12	-0.15	-0.20	-0.33	-0.29	0.11	1.03		-0.06
1973	-1.35	-0.49	-0.33	-0.36	-0.38	-0.39	-0.20	-0.21	-0.13	-0.42	-1.02	-0.07	-0.45
1974	-0.58	-0.51	-0.38	-0.32	-0.25	-0.28	-0.31	-0.35	-0.47	-0.38	-0.85		-0.43
1975	-0.20	-0.17			0.61	0.57	0.50	0.17	-0.13	0.14	0.85	0.43	0.28
1976	0.03	0.05	-0.19	-0.25	-0.13	0.09	0.47	0.12	0.44	0.08	0.05	0.07	0.07
1977	-0.45	-0.41	-0.36	-0.34	-0.08	-0.27	-0.22	-0.19	-0.18	-0.37	-0.85	0.28	-0.29
1978	0.26	0.60	0.32	-0.08	-0.15	-0.22		-0.11	0.32	-0.07	0.94		0.18
1979	-0.13	0.24	-0.07	0.89	0.34	-0.05	0.12	-0.07	-0.17	-0.28	-0.61	0.17	0.03
1980	-0.42		-0.30	-0.09	0.07	-0.02	-0.18	-0.21	-0.28		0.74	-0.36	-0.11
1981	-0.01		0.40	0.41	0.19	0.19	0.17		0.01	0.06	0.89	0.86	0.32
1982	0.49	0.30	-0.26	-0.09	-0.06	-0.07	-0.03		0.22	0.03			0.06
1983		0.22		-0.22	-0.21	-0.13	-0.17	0.18	-0.21	-0.32	-0.75	0.36	-0.13
1984	0.35	-0.38		-0.12	-0.17	-0.24	-0.15	-0.24	-0.49	-0.61	-0.28	-0.77	-0.28
1985	-1.26	-0.49	-0.36	-0.26	-0.19	-0.22	-0.21	-0.28	-0.48	-0.45	-0.52	-0.19	-0.41
1986	-0.58	-0.29	-0.34	-0.16	-0.09	-0.27	-0.14	-0.32	-0.25	0.01	-0.21	-0.01	-0.22
1987	-0.41	-0.32	-0.18	-0.28	-0.12	-0.24	0.02	-0.03	-0.15	-0.11	-0.30	-0.16	-0.19
1988	-0.03	0.05		-0.19	-0.08	-0.07	0.06	0.13	0.35	0.56	0.05	0.08	0.08
1989	-0.21	-0.29		-0.22	-0.12	-0.14	0.16	0.15	0.36	0.36	0.43	-0.11	0.03
1990	-0.49	-0.35	-0.25	-0.07	0.38	0.11	0.17	0.25	0.40	0.32	-0.23	-0.04	0.02
1991		-0.40	-0.32	-0.29	-0.26	-0.36	-0.27	-0.37	-0.33	-0.74	-1.36	-0.85	-0.50
1992	-0.59	-0.41	-0.43	-0.33	0.04	-0.12	-0.10	-0.32	-0.53	-0.66	-0.19	-0.11	-0.31
1993	-1.16	-0.55	-0.36	-0.26	-0.13	-0.33	-0.19	-0.27	-0.49	-0.45	-0.60	-0.39	-0.43
1994	-0.49	-0.34	-0.43	-0.28	0.19	-0.26	-0.21	-0.37	-0.33	-0.35	0.55	0.01	-0.19
1995	-0.11	-0.20	-0.31	-0.40	-0.26	-0.29	-0.18	-0.25	-0.15	-0.24	-0.59	0.21	-0.23
1996	0.16	0.50	0.64	0.48	0.19	0.23	0.47	0.61	1.41	0.68	0.25	0.73	0.53
1997	0.49			-0.10	0.02	-0.13	-0.08	-0.17	-0.20	-0.53	-0.48	0.24	-0.09
1998	0.05		0.11	0.03	-0.06	-0.18	-0.06	-0.30	-0.42	-0.57	-1.08	-0.34	-0.26
1999	-0.06		0.37	0.05	0.32	0.13	0.13	0.05	0.08	0.06	-0.46	0.07	0.07

MONTHLY AVERAGE 125 METER TEMPERATURE ANOMALIES (°C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									0.63	0.55			0.59
1950									-0.09			0.13	0.02
1951						-0.02							-0.02
1957				-0.42									-0.42
1964			-0.05	-0.33	0.10	-0.12	-0.08	-0.04	-0.20	0.07	0.44		-0.02
1965	0.10	0.15	0.18	-0.13	-0.13	-0.08	0.11	0.22	0.49	0.14	-0.01	-0.51	0.04
1966		0.85	0.72	0.66	0.34	0.53	0.71	0.60	0.59	0.69	0.31	0.25	0.57
1967	0.47	0.23	-0.07	-0.08	-0.12	-0.13	-0.11	-0.07	0.10	0.30	-0.01	0.89	0.12
1968	1.09	0.94	0.90	0.35	0.44	0.28	0.13	0.08	0.13	0.19	-0.25	0.27	0.38
1969	0.63	0.97	0.80	0.78	0.62	0.44	0.42	0.22	0.08	0.11	-0.07	-0.60	0.37
1970	0.05	0.55	0.38	0.08	0.18	0.17	0.21	-0.07		-0.21	-0.68	-0.14	0.05
1971	-0.36	0.10	0.24	-0.13	-0.03	0.00	-0.06	0.02	-0.12	0.33	-0.15	0.66	0.04
1972	0.22	0.35	-0.20	-0.17	-0.08	0.02	-0.22	-0.24	-0.24	-0.21	0.56		-0.02
1973	-1.28	-0.59	-0.42	-0.40	-0.29	-0.25	-0.21	-0.28	-0.34	-0.38	-0.59	0.04	-0.42
1974	-0.43	-0.61	-0.38	-0.38	-0.27	-0.31	-0.29	-0.25	-0.35	-0.35	-0.48		-0.37
1975	-0.19	-0.34			0.06	-0.10	0.01	0.04	0.01	0.76	0.76	0.95	0.20
1976	0.39	0.38	-0.11	-0.25	0.04	0.25	0.29	0.03	-0.09	-0.18	-0.42	-0.72	-0.03
1977	-0.43	-0.35	-0.40	-0.24	-0.12	-0.11	-0.20	-0.19	-0.28	-0.38	-0.59	0.01	-0.27
1978	0.24	0.76	0.43	0.02	0.15	-0.13	0.05	0.25	-0.05		0.94		0.27
1979	-0.03	0.32		1.11	0.44	-0.04	0.13	-0.01	-0.05	0.06	-0.06	-0.06	0.16
1980	-0.32		-0.26	-0.13	0.25	-0.03	-0.11	-0.15	-0.23		-0.34	-0.64	-0.20
1981	-0.32		0.48	0.28	0.18	0.23	0.20		0.04	0.12	-0.05	-0.16	0.10
1982	0.36	0.47	-0.25	-0.13	-0.09	-0.03	-0.07		0.15	0.23	-0.22		0.04
1983		0.11			-0.10		-0.15	-0.20	-0.32	-0.27	-0.56	0.28	-0.15
1984	0.01	-0.09		-0.16	-0.16	-0.13	-0.13	-0.11	-0.31	-0.26	-0.51	-0.18	-0.18
1985	-1.04	-0.64	-0.41	-0.35	-0.17	-0.26	-0.23	-0.19	-0.34	-0.13	-0.39	0.51	-0.30
1986	-0.29	-0.18	-0.29	-0.21	-0.17	-0.17	-0.17	-0.08	-0.10	0.02	0.15	0.05	-0.12
1987	-0.35	-0.18	0.11	-0.18	-0.05	-0.20	-0.22	-0.04	-0.27	-0.16	-0.20	-0.38	-0.18
1988	-0.19	-0.04		-0.23	-0.10	0.05	0.04	0.09	0.19	0.42	0.67	0.57	0.13
1989	0.06	-0.11		-0.28	0.02	0.04	0.03	-0.03	0.16	0.09	0.18	0.12	0.03
1990	-0.19	-0.31	-0.13	-0.29	0.01	-0.07	0.09	0.17	0.26	0.36	-0.02	0.12	0.00
1991		-0.50	-0.40	-0.27	-0.20	-0.30	-0.24	-0.23	-0.24	-0.39	-0.70	-0.97	-0.40
1992	-0.26	-0.26	-0.51	-0.43	-0.07	-0.13	-0.13	-0.21	-0.31	-0.32	-0.25	0.00	-0.24
1993	-0.75	-0.66	-0.45	-0.31	-0.12	-0.24	-0.21	-0.22	-0.35	-0.37	-0.54	-0.63	-0.40
1994	-0.33	-0.31	-0.48	-0.35	-0.15	-0.26	-0.25	-0.32	-0.34	-0.35	0.34	-0.19	-0.25
1995	-0.24	-0.20	-0.45	-0.39	-0.16	-0.17	-0.13	-0.20	-0.15	-0.10	-0.06	0.15	-0.18
1996	0.25	0.64	0.75	0.33	0.11	0.22	0.27	0.43	0.83	0.40	0.18	0.33	0.40
1997	0.31			-0.13	0.09	-0.08	-0.03	-0.02	-0.15	-0.19	-0.24	0.60	0.02
1998	0.19		0.22	0.17	0.13	-0.12	-0.03	-0.15	-0.23	-0.19	-0.37	-0.57	-0.09
1999	0.06		0.38	0.08	0.21	0.02	0.03	0.09	0.06	0.13	-0.24	0.46	0.12

MONTHLY AVERAGE 150 METER TEMPERATURE ANOMALIES (^{o}C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							-0.17	-0.08	0.01	-0.05	-0.11	0.73	0.06
1947			-0.22		-0.07	0.00	-0.03		0.58	0.37	0.39		0.15
1948			-0.32	-0.28	-0.19	-0.17	-0.09	-0.14					-0.20
1949						-0.13		0.11	0.19			-0.05	0.03
1950	0.07		-0.58	-0.45		-0.37	-0.36	-0.21	-0.28		-0.27	0.18	-0.25
1951	0.85	0.49	0.31	0.35	0.31	0.09	0.04	0.16	0.55	0.29			0.34
1952	-0.24			0.11	0.67	0.62	0.25	0.09	0.02	0.25		0.29	0.23
1953		0.61		0.96	0.55	0.12	-0.06	0.05	0.29	0.19	0.05	0.36	0.31
1954	0.25	0.33	0.00	0.10	-0.09	-0.01	-0.15	-0.14	-0.09	0.04	0.09	0.10	0.04
1955	0.70	0.63		0.37	0.13	0.18	0.11	0.07	0.15	0.17	0.11	0.21	0.26
1956	0.36	0.76	0.79	0.56	0.31	-0.02	0.01	0.08	-0.09	-0.09	0.04	0.44	0.26
1957	0.00	-0.09	-0.50	-0.33	-0.02	-0.26	-0.28	-0.08	0.05	0.15	-0.09	-0.22	-0.14
1958	-0.04	0.17	0.36	0.48	0.52	0.30	0.21	0.23	0.01	0.20	0.10	0.86	0.28
1959	0.64	-0.29	-0.42	-0.29	-0.23	-0.27	-0.16	-0.08	-0.16	-0.18	-0.27	-0.17	-0.16
1960	0.27	0.22	0.35	0.36	0.08	0.00	0.13	0.00	0.19	0.12	-0.09	-0.10	0.13
1961	-0.02	-0.32	-0.35		-0.18	-0.12	-0.02	-0.01	0.01	0.04	0.02		-0.10
1962	0.94	0.90	-0.06		0.20	0.19	0.29	0.19	0.08	0.32	0.32		0.34
1963	0.35	0.55	0.37	-0.20	0.03	0.11	0.04	0.14	0.01	0.06	0.07	0.16	0.14
1964	0.45	-0.01	-0.26	-0.41	-0.16	-0.18	-0.17	-0.03	-0.07	-0.11	0.18	-0.06	-0.07
1965	0.13	-0.03	0.13	-0.10	-0.25	-0.12	0.15	0.29	0.11	0.53	0.25	0.45	0.13
1966		0.86	0.94	0.68	0.37	0.77	0.90	0.83	1.22	0.95	0.77	0.54	0.80
1967	0.53	0.47	0.02	-0.14	-0.02	-0.15	-0.11	-0.17	-0.06	0.04	0.21	0.39	0.08
1968	0.90	0.89	0.85	0.71	0.99	0.33	0.22	0.25	0.18	0.11	0.08	-0.09	0.45
1969	-0.16	0.68	0.61	0.72	0.74	0.60	0.46	0.55	0.38	0.26	0.12	-0.19	0.40
1970	0.16	0.21	0.39	0.47	0.58	0.40	0.83	0.17		-0.06	-0.29	0.08	0.27
1971	-0.04	0.09	0.30	0.04	-0.07	-0.02	-0.01	-0.03	0.29	0.06	0.04	0.50	0.10
1972	0.42	0.02	-0.33	-0.20	-0.15	-0.21	-0.33	-0.27	-0.32	-0.31	-0.06		-0.16
1973	-0.95	-0.76	-0.52	-0.40	-0.33	-0.35	-0.29	-0.36	-0.40	-0.27	-0.31	-0.16	-0.43
1974	-0.36	-0.67	-0.59	-0.51	-0.32	-0.41	-0.46	-0.35	-0.33	-0.36	-0.38		-0.43
1975	0.08	-0.16			-0.19	-0.23	-0.23	0.10	0.32	0.20	0.20	0.55	0.06
1976	0.59	0.46	0.07	0.14	0.34	0.23	0.11	0.01	-0.14	-0.20		-0.41	0.11
1977	-0.32	-0.27	-0.18	0.06	-0.09	0.09		-0.22	-0.25	-0.11	0.03	-0.36	-0.15
1978	-0.29	0.37		0.04	0.24	0.44	0.03	0.25	0.08	0.07	0.39		0.16
1979	0.29	0.06	0.02	0.32	-0.09	-0.15	0.22	0.01	0.07	0.40	0.06	0.01	0.10
1980	0.21		0.20	0.06	0.33		-0.12	0.09	-0.06		-0.04	-0.25	0.05
1981	-0.33		0.39	0.32	0.36	0.39	0.05		0.25	0.10	0.08	0.08	0.17
1982	0.18	0.22	-0.34	-0.08	-0.02	-0.03	-0.04		0.01	0.10	-0.01		0.00
1983		0.10		-0.24	-0.21	-0.17	-0.26	-0.17	-0.27	-0.30	-0.43	-0.13	-0.21
1984	-0.21	-0.30		-0.32	-0.23	-0.09	-0.19	-0.15	-0.20	-0.22	-0.31	-0.31	-0.23
1985	-0.60	-0.85	-0.61	-0.45	-0.34	-0.42	-0.35	-0.29	-0.35	-0.39	-0.37	-0.19	-0.43
1986	-0.27	-0.15	-0.34	-0.32	-0.28	-0.12	-0.14	0.09	0.09	0.21	0.18	-0.01	-0.09
1987	0.04	0.12	0.10	-0.06	0.03	-0.25	-0.22	-0.16	-0.20	-0.16	-0.16	-0.11	-0.09
1988	-0.02	-0.03		-0.22	-0.22	0.07	0.01	0.08	0.14	0.10	1.01	0.45	0.12
1989	0.05	0.02		-0.10	0.13	-0.05	-0.08	-0.14	-0.10	-0.14	-0.11	0.03	-0.04
1990	-0.03	-0.23	-0.24	-0.36	-0.30	-0.23	-0.11	-0.03	-0.06	0.07	-0.35	-0.46	-0.19
1991		-0.57	-0.64	-0.33	-0.29	-0.38	-0.34	-0.28	-0.36	-0.38	-0.41	-0.61	-0.42
1992	-0.10	-0.45	-0.76	-0.57	-0.21	-0.26	-0.25	-0.24	-0.34	-0.23	-0.15	-0.35	-0.33
1993	-0.38	-0.53	-0.60	-0.41	-0.13	-0.30	-0.35	-0.28	-0.37	-0.42	-0.41	-0.54	-0.39
1994	-0.21	-0.36	-0.64	-0.45	-0.27	-0.35	-0.36	-0.33	-0.36	-0.27	-0.12	0.07	-0.30
1995	0.12	-0.20	-0.49	-0.44	-0.15	-0.22	-0.18	-0.23	-0.19	-0.12	-0.02	0.04	-0.17
1996	0.24	0.49	0.64	0.45	0.26	0.29	0.17	0.05	0.31	0.24	0.10	0.30	0.30
1997	0.21			-0.06	0.23	0.13	0.08	0.06	0.01	0.01	-0.05	-0.08	0.05
1998	0.20		0.43	0.23	0.15	0.17	-0.01	-0.06	-0.04	0.26	0.11	0.01	0.13
1999	0.32		0.39	0.55	0.32	0.16	-0.04	0.09	0.13	0.14	0.31	0.35	0.25

MONTHLY AVERAGE 175 METER TEMPERATURE ANOMALIES (°C)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												-0.01	-0.01
1947			-0.60			-0.03	0.06		0.59	0.74	0.84		0.27
1948			-0.74	-0.27	-0.11	-0.17	-0.03	0.15					-0.20
1949						0.11	0.20	0.24	-0.01	-0.10		-0.10	0.06
1950	0.10		-0.72	-0.65			-0.48	-0.40	-0.46		-0.34	-0.47	-0.43
1951		0.13	0.23	0.14	0.27	0.25	0.24	0.08	0.12	0.20			0.18
1952	-0.12			0.55	0.89	0.64	0.19	0.13	-0.03	-0.35		-0.10	0.20
1953		0.45		0.92	0.54	0.08	-0.10	0.00	0.08	0.04	-0.13	0.18	0.21
1954	0.40	0.36	0.27		0.08	0.21	0.06	-0.19	-0.29	-0.12	-0.06	-0.02	0.06
1955	0.22	0.38		0.25	0.34	0.15	-0.07	-0.05	-0.01	0.00	0.04	0.06	0.12
1956	0.24	0.69	0.54	0.27	-0.08	0.01	-0.09	-0.13	0.00	0.11	-0.01	-0.08	0.12
1957		-0.20	-0.42	-0.08	-0.15	-0.13	-0.24	-0.03	-0.06	0.13	0.06	-0.06	-0.11
1958	-0.11	-0.03	0.13	0.26	0.41	0.47	0.31	0.21	0.23	0.39	0.10		0.22
1959	0.57	-0.32	-0.53	-0.35	-0.43	-0.43	-0.41	-0.28	-0.27	-0.28	-0.31	-0.26	-0.28
1960	-0.19	0.07	0.09	0.46	0.72	0.64	0.38	0.09	0.27	0.17	0.22	-0.01	0.24
1961	0.02	-0.23	-0.34		-0.29	-0.22	-0.12	-0.14	-0.09	-0.04	0.09		-0.14
1962	0.85	0.80	-0.01	0.14	0.08	0.13	0.25	0.20	0.03	0.42	0.39		0.30
1963	0.11	0.30	0.22	-0.18	0.02	0.42	0.39	0.09	0.03	-0.06	0.12	0.30	0.15
1964	0.57	-0.05	-0.18	-0.37	-0.39	-0.29	-0.25	-0.19	-0.22	-0.20	0.17	0.07	-0.11
1965	0.15	0.10	0.11	0.00	-0.18	-0.01	0.30	0.30	0.16	0.50	0.35	0.62	0.20
1966		0.90	1.04	0.73	0.67	1.27	1.31	1.31	1.46	1.49	0.99	0.70	1.08
1967	0.71	0.43	0.37	-0.10	0.10	-0.13	-0.17	-0.21	-0.05	0.33	0.32	0.39	0.17
1968	0.76	0.75	0.76	0.99	1.17	0.47	0.71	0.58	0.28	0.29	0.12	0.00	0.57
1969	-0.12	0.29	0.36	0.48	0.67	0.71	0.49	0.69	0.53	0.34	0.29	0.10	0.40
1970	0.20	0.06	0.24	0.50	0.75	0.62	0.87	0.39		0.27	0.06	-0.20	0.34
1971	-0.13	0.10	0.36	0.26	0.14	0.02	-0.10	0.06	0.27	-0.05	0.12	0.09	0.10
1972	0.13	0.07	-0.15	-0.38	-0.15	-0.37	-0.36	-0.38	-0.50	-0.45	-0.35		-0.26
1973	-0.75	-0.84	-0.72	-0.64	-0.52	-0.57	-0.49	-0.51	-0.40	-0.47	-0.23	-0.34	-0.54
1974	-0.32	-0.67	-0.74	-0.70	-0.50	-0.51	-0.60	-0.51	-0.43	-0.43	-0.45		-0.53
1975	-0.27	-0.29		0.18	-0.40	-0.34	-0.31	-0.09	0.34	0.18	0.31	0.49	-0.02
1976	0.69	0.46	0.14	0.18	0.19	0.23	0.03	-0.10	-0.26	-0.35	-0.30	-0.20	0.06
1977	-0.17	-0.18	-0.11	0.01	0.02	0.06	-0.03	-0.33	-0.23	-0.08	-0.11	0.23	-0.08
1978	-0.34	0.28	0.18	0.17	0.60	0.08	-0.10		0.28		0.44		0.18
1979	0.46	0.27	0.55	0.55	0.11	0.19	-0.07	0.10	0.22	0.52	0.28	0.18	0.28
1980	0.37		0.16	0.15	0.16	0.40	-0.03	0.33	0.55			-0.06	0.23
1981	-0.15		0.05	0.25	0.21	0.16	0.25		0.29	0.12	0.54	0.55	0.23
1982	0.47	0.09	0.16	0.12	0.11	-0.18	-0.15		0.03	0.14	-0.09		0.07
1983		0.09		-0.32		-0.30	-0.35	-0.35	-0.38	-0.47	-0.48	-0.35	-0.32
1984	-0.62	-0.54		-0.33	-0.25	-0.20	0.01	-0.20	-0.26	-0.30	-0.42	-0.39	-0.32
1985	-0.56	-0.92	-0.73	-0.67	-0.20	-0.56	-0.49	-0.47	-0.43	-0.49	-0.39	-0.14	-0.50
1986	-0.31	-0.21	-0.57	-0.55	-0.38	-0.24	-0.16	0.22	0.25	0.35	0.08	-0.03	-0.13
1987	0.07	0.05	0.04	-0.15	-0.03	-0.12	-0.27	-0.15	-0.27	-0.15	0.04	-0.09	-0.09
1988	-0.02			-0.32	-0.25	-0.07	-0.07	-0.06	-0.12	-0.12	0.20	-0.07	-0.09
1989	-0.10	0.00		-0.08	0.01	-0.09	-0.18	-0.25	-0.31	-0.33	-0.23	-0.09	-0.15
1990	-0.02	-0.12	-0.39	-0.55	-0.50	-0.39	-0.32	-0.27	-0.34	-0.32	-0.23	-0.40	-0.32
1991		-0.60	-0.81	-0.47	-0.42	-0.51	-0.49	-0.46	-0.55	-0.48	-0.36	-0.49	-0.51
1992	-0.21	-0.50	-0.70	-0.76	-0.34	-0.36	-0.34	-0.21	-0.39	-0.24	-0.18	-0.26	-0.37
1993	-0.40	-0.55	-0.76	-0.45	-0.31	-0.43	-0.48	-0.44	-0.56	-0.61	-0.46	-0.55	-0.50
1994	-0.48	-0.49	-0.78	-0.62	-0.45	-0.50	-0.46	-0.37	-0.44	-0.28	-0.13	-0.26	-0.44
1995	-0.15	-0.28	-0.35	-0.33	-0.28	-0.32	-0.30	-0.32	-0.23	-0.08	0.07	0.03	-0.21
1996	0.32	0.43	0.48	0.37	0.25	0.32	0.21	0.14	0.11	0.08	0.04	0.37	0.26
1997	0.15			0.19	0.39	0.17	0.03	0.00	0.07	0.24	0.17	0.00	0.14
1998	0.52		0.34	0.36	0.26	0.53	0.22	0.00	0.16	0.37	0.31	0.17	0.29
1999	0.29		0.37		0.63	0.52	0.28	0.06	0.06	0.13	0.53	0.33	0.32

Appendix B-1. Monthly averages of salinity by year at standard depths.

MONTHLY AVERAGE SURFACE SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						32.26	31.62	31.15	30.97	31.08	31.50	31.71	31.47
1947			32.50		32.22	32.02	31.82		31.35	31.20			31.85
1948			32.66	32.51	32.14	32.10	31.75						32.23
1949						32.00		31.12	31.34			32.04	31.63
1950			32.31	31.99		32.21	31.67	31.31	31.19		31.58	31.64	31.74
1951	31.98	32.08	31.92	31.61	31.63	31.54	31.47	31.69	31.43	31.20			31.66
1952	31.92			32.14	32.12	31.95	31.48	30.31	30.52	30.74		31.65	31.43
1953		32.01		31.45	31.77		31.43	31.62	31.43	31.43	31.45	31.93	31.61
1954	32.16	32.09	32.05	32.27	32.41	32.23	31.70	31.61	31.53	31.41	31.68	31.93	31.92
1955	32.14	32.35		32.06	31.88	31.78	31.72	31.28	31.22	31.33	31.35	31.79	31.72
1956	31.87	32.04	32.27	32.25	32.20	31.88	31.86	31.79	31.47	31.35	31.57	31.76	31.86
1957	32.07	32.42	32.47	32.26	31.83	31.46	31.08	31.19	30.95	30.79	30.91	31.65	31.59
1958	31.80	31.89	31.98	32.00	32.08	31.93	31.56	31.35	31.12	31.12	31.29	31.78	31.66
1959	32.11	32.54	32.68	32.67	32.37	32.07	31.53	31.17	31.05	31.04	31.31	31.60	31.85
1960	31.82		32.16	32.21	31.95	31.80	31.80	31.16	30.85	31.18	31.41	31.75	31.64
1961	31.98		32.38			31.71	31.72	31.47	31.25	31.20	31.39		31.64
1962	32.01	32.32	32.22		32.22	32.01	31.45	31.43	31.32	31.11	31.03		31.71
1963	31.87	32.27	32.52	32.54	32.35	32.18	31.92	31.75	31.25	31.12	31.32	31.77	31.91
1964	31.84	32.36	32.63	32.62	32.37	32.09	32.16	31.52	31.06	31.30	31.59	31.81	31.95
1965		32.47	32.32	32.28	32.27	31.63	31.65	31.76	31.70	31.54	31.79	32.07	31.95
1966		32.35	32.35	32.21	32.10	32.07	31.93	31.78	31.40	31.55	31.63	31.60	31.91
1967	31.68	32.09	32.36	32.17	31.85	31.87	31.84	31.74	31.43	31.42	31.67	32.01	31.84
1968	32.26	32.27	32.35	32.30	32.26	32.08	31.76	31.46	31.00	31.02	31.34	31.73	31.82
1969	32.11	32.00	32.19	32.22	32.13	31.87	31.79	31.52	31.26	31.20	31.43	31.61	31.78
1970	31.84	31.83	31.82	32.02	31.82	31.44	31.42	30.67		30.60	30.65	31.20	31.39
1971	31.88	31.80	32.02	32.18	32.08	31.88	31.49	30.93	30.73	31.00	31.26	31.69	31.58
1972	31.95	32.35	32.52	32.57	32.39	32.16	31.84	30.77	30.69	30.87	31.36		31.77
1973	32.09	32.19	32.34	31.78	31.06	31.27	31.20	31.03	31.01	31.00	31.54	31.76	31.52
1974	32.00	32.30	32.50	32.62	32.58	31.81	31.29	30.35	29.90	30.18	30.78		31.48
1975	31.96				32.25	32.26	31.71	31.15	30.72	30.97	31.36	31.78	31.57
1976	32.01	32.11	32.44	32.47	32.41	32.37	32.10		31.12	31.27	31.73	31.99	32.00
1977	32.25	32.57	32.56	32.46	32.43	31.94	31.50	30.76	30.52	30.64	31.13	31.73	31.71
1978	31.92	32.25		32.23	32.32	32.31	31.87		30.91	31.32	31.53		31.85
1979	32.18	32.27	32.40	32.51	32.16	32.05	31.88	31.35	31.19	31.41	31.41	31.72	31.88
1980	32.00		32.39	32.34	32.29	32.04	31.79	31.35	31.16				31.92
1981	32.02		32.45	32.23	32.17	32.07	31.76		30.90		31.23	31.74	31.84
1982	32.12	32.49	32.67	32.61	32.49	32.30	32.11		31.08	31.14	31.04		32.01
1983		32.03		31.54	31.42	31.63	31.19		30.80	30.81	31.06	31.40	31.32
1984	31.69	32.02		31.68	31.18	31.22	30.44	30.43	30.34	30.45	30.95	31.44	31.08
1985	31.96	32.17	32.45	32.48	32.31	32.24	32.14	30.97	30.50	30.66	31.14		31.73
1986	31.99	32.28	32.33	32.32	32.23	32.01	31.72	31.52		31.24	31.42	31.92	31.91
1987	32.22	32.27		31.48	31.88	32.01	31.77	31.69	31.52	31.40	31.54	31.75	31.78
1988		32.33		32.45	32.26	32.05	31.95	31.78	31.19	31.05	31.52	31.63	31.82
1989	31.94	32.15		32.61	32.72	32.56	32.02	31.67	31.11	31.45	31.64	32.00	31.99
1990	32.16	32.46	32.51	32.56	32.60	32.24	31.95	31.79	31.25	31.00		31.98	32.05
1991		32.25	32.28	31.95	31.62	31.10	30.56	31.00	30.71	30.32	30.46	31.06	31.21
1992	31.19	30.37		32.43	32.24	32.00	31.39	30.94	30.83	30.96	31.26	31.58	31.38
1993	31.91	32.07	31.84	31.83	32.01	31.76	31.40	31.12	31.31	31.39	31.44	31.71	31.65
1994	32.02	32.16		32.32	32.13	32.03	31.65	30.29	30.39	30.94	31.24	31.61	31.53
1995		31.97		31.54	30.98	31.02	31.00	30.39	30.54	30.80	31.46	31.83	31.15
1996	31.96	32.00	32.21	32.23	32.23	32.12	31.85	31.55	30.74	30.87	31.22	31.61	31.72
1997	31.88			32.26	31.83	31.78	31.44	31.20	30.88	30.80	31.19	31.68	31.49
1998	31.86		32.22	32.12	31.74	31.50	31.18	31.07	31.09	31.11	31.38	31.84	31.56
1999	32.09		32.33	32.04	32.01	31.85	31.12	30.84	30.78	30.91	31.25	31.66	31.53

MONTHLY AVERAGE 10 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						32.36							32.36
1959	32.17	32.55	32.78	32.70	32.43	32.09	31.61	31.26	31.09	31.06	31.36	31.61	31.89
1960	31.82		32.20	32.24	31.96	31.80	31.82	31.29	30.85	31.21	31.42	31.77	31.67
1961	32.01	32.29	32.37			31.69	31.81	31.49	31.26	31.20	31.40		31.72
1962	32.01	32.34	32.28		32.23	32.01	31.46	31.47	31.30	31.14	31.20		31.74
1963	31.89	32.25	32.52	32.53	32.34	32.15	31.90	31.77	31.25	31.12	31.33	31.75	31.90
1964	31.85	32.28	32.59	32.63	32.51	32.09	32.18	31.65	31.12	31.32	31.62	31.84	31.97
1965	32.06	32.35	32.29	32.33	32.22	31.65	31.73	31.80		31.55	31.83	32.05	31.99
1966		32.45	32.34	32.21	32.22	32.08	31.95	31.85	31.42	31.50	31.57	31.60	31.93
1967	31.59	31.99	32.39	32.25	31.92	31.94	31.86	31.74	31.42	31.34	31.64	32.04	31.84
1968	32.23	32.23	32.31	32.28	32.26	32.11	31.79	31.46	31.00	31.00	31.34	31.73	31.81
1969	32.17	32.20	32.21	32.22	32.16	31.91	31.79	31.45	31.17	31.22	31.45	31.63	31.80
1970	31.85	31.82	31.87	32.02	31.80	31.45	31.47	30.70		30.67	30.67	31.27	31.42
1971	31.90	31.81	32.05	32.20	32.10	31.89	31.52	30.97	30.66	30.93	31.34	31.72	31.59
1972	31.97	32.33	32.55	32.62	32.40	32.20	31.86	30.74	30.69	30.82	31.36		31.78
1973	32.06	32.23	32.41	32.16	31.17	31.33	31.18	31.04	30.91	31.07	31.55	31.81	31.58
1974	32.01	32.27	32.50	32.66	32.55	31.79	31.29	30.56	29.96	30.14	30.72		31.50
1975	31.94	32.34			32.30	32.26	31.83	31.20	30.76	30.99	31.43	31.81	31.69
1976	32.01	32.22	32.38	32.53	32.42	32.34	32.12	31.71	31.19	31.22	31.71	31.89	31.98
1977	32.15	32.46	32.39	32.45	32.47	31.97	31.86	31.00	30.52	30.66	31.14	31.74	31.73
1978	31.98	32.24	32.28	32.28	32.19	32.29	31.93	31.41	31.00	31.36	31.76		31.88
1979	32.17	32.34	32.44		32.25	32.11	32.02	31.40	31.16	31.31	31.40	31.69	31.84
1980	31.97		32.32	32.33	32.27		31.84	31.51	31.18				31.92
1981	31.87		32.29	32.23	32.17	32.08	31.80		30.88	30.97	31.20	31.59	31.71
1982	32.14	32.48	32.65	32.64	32.49	32.28	32.15		31.09	31.10	31.05		32.01
1983		32.20		31.73	31.44	31.64	31.37	31.16	30.80	30.73	31.05	31.43	31.36
1984	31.78	32.02		32.06	31.61	31.51	30.99	30.90	30.38	30.46	30.97	31.47	31.29
1985	31.96	32.17	32.45	32.50	32.45	32.30	32.16	31.01	30.52	30.66	31.21		31.76
1986	32.01	32.33	32.41	32.34	32.25	32.01	31.74	31.58	31.42	31.26	31.43	31.92	31.89
1987	32.22	32.28		32.14	31.97	32.03	31.80	31.71	31.54	31.41	31.55	31.75	31.85
1988		32.33		32.45	32.28	32.11	32.14	31.92	31.20	31.05	31.54	31.66	31.87
1989	31.94	32.20		32.63	32.76	32.57	32.03	31.69	31.12	31.49	31.66	32.01	32.01
1990	32.18	32.50	32.54	32.57	32.62	32.29	31.98	31.87	31.28	30.96		31.95	32.07
1991		32.25	32.29	31.98	31.66	31.22	30.79	31.10	30.76	30.44	30.60	31.11	31.29
1992	31.41	31.40	32.40	32.39	32.25	32.10	31.47	30.94	30.86	31.05	31.20	31.58	31.59
1993	31.92	32.07	32.24	32.11	31.89	31.78	31.51	31.15	31.50	31.40	31.47	31.72	31.73
1994	32.02	32.14		32.34	32.23	32.08	31.74	30.64	30.26	30.92	31.25	31.63	31.57
1995		31.98		31.65	31.34	31.16	31.06	30.40	30.58	30.88	31.49	31.77	31.23
1996	31.97	32.00	32.20	32.24	32.24	32.11	31.87	31.59	30.77	30.89	31.24	31.61	31.73
1997	31.89			32.25	31.88	31.81	31.52	31.24	30.88	30.87	31.20	31.68	31.52
1998	31.86		32.23	32.19	31.77	31.58	31.29	31.20	31.16	31.13	31.39	31.84	31.60
1999	32.09		32.37	32.16	32.03	31.89	31.34	30.86	30.79	30.92	31.27	31.68	31.58

MONTHLY AVERAGE 20 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										30.92			30.92
1954		32.14		32.20									32.17
1955					32.07			31.51					31.79
1956								32.52		31.51			32.02
1957		32.39		32.47		31.53							32.13
1958									31.13				31.13
1959	32.31	32.59	32.74	32.73	32.44	32.09	31.86	31.49	31.11	31.05	31.42	31.65	31.96
1960	31.84		32.25	32.24	32.01	31.85	32.09	31.51	30.91	31.24		31.80	31.77
1961	32.05	32.32	32.40			32.03	32.02	31.78	31.34	31.27	31.40		31.85
1962	32.01	32.36	32.38		32.26	32.07	31.83	32.04	31.45	31.22	31.30		31.89
1963	32.02	32.31	32.54	32.54	32.39	32.22	31.91	31.87	31.35	31.13	31.35	31.77	31.95
1964	31.85	32.30	32.60	32.66	32.42	32.35	32.35	31.87	31.22	31.34	31.75	31.89	32.05
1965	32.06	32.35	32.32	32.33	32.28	31.84	31.98	32.15	31.97	31.55	31.78	32.06	32.06
1966		32.46	32.42	32.25	32.34	32.12	32.25	32.09	31.47	31.52	31.56	31.59	32.01
1967	31.61	32.03	32.32	32.37	32.23	32.03	32.03	32.10	31.52	31.36	31.69	32.05	31.95
1968	32.23	32.24	32.33	32.31	32.28	32.17	31.84	31.60	31.03	31.05	31.43	31.73	31.85
1969	32.19	32.20	32.24	32.23	32.16	32.06	32.00	31.49	31.19	31.22	31.52	31.66	31.85
1970	31.85	31.96	31.95	32.05	31.89	31.52	31.51	30.98		30.69	30.68	31.35	31.49
1971	31.96	31.88	32.12	32.22	32.10	31.97	31.67	31.15	30.70	30.93	31.35	31.74	31.65
1972	31.99	32.34	32.56	32.62	32.46	32.25	32.00	30.89	30.75	30.83	31.39		31.83
1973	32.18	32.27	32.44	32.37	31.73	32.05	31.81	31.41	30.93	31.10	31.58	31.81	31.81
1974	32.01	32.29	32.51	32.66	32.57	31.81	31.55	31.44	30.41	30.17	30.80		31.66
1975	32.00	32.30			32.39	32.37	32.17	31.89	31.38	31.11	31.47	31.81	31.89
1976	32.03		32.44	32.51	32.43	32.36	32.16	31.74	31.22	31.24	31.72	31.94	31.98
1977	32.24	32.46	32.40	32.49	32.54	32.12	32.16	31.43	30.97	30.67	31.25	31.78	31.88
1978	32.04	32.24	32.29	32.35	32.25	32.29	31.97	31.39	30.99	31.36	31.76		31.90
1979	32.24	32.35	32.45		32.29	32.38	32.32	31.67	31.17	31.31	31.39	31.59	31.92
1980			32.36	32.38	32.29	32.08	32.18	31.82	31.19				32.04
1981	31.93		32.32	32.27	32.29	32.25	31.81		30.98	31.09	31.23	31.60	31.78
1982	32.21	32.48	32.66	32.68	32.53	32.32	32.33		31.13	31.10	31.16		32.06
1983		32.20		31.91	31.64	31.79	31.73	31.32	30.89	30.75	31.03	31.46	31.47
1984	31.77	32.03		32.20	32.03	32.13	31.43	31.32	30.61	30.52	31.00	31.51	31.50
1985	31.98	32.18	32.46	32.54	32.52	32.38	32.31	31.65	30.68	30.67	31.34		31.88
1986	32.01	32.35	32.45	32.38	32.28	32.08	31.79	31.80	31.31	31.27	31.42	31.93	31.92
1987	32.22	32.28		32.30	32.10	32.19	32.00	31.81	31.63	31.43	31.57	31.75	31.93
1988		32.33		32.49	32.36	32.24	32.57	32.33	31.28	31.19	31.62	31.67	32.01
1989	31.95	32.23		32.66	32.80	32.63	32.11	31.85	31.18	31.57	31.69	32.05	32.07
1990	32.20	32.53	32.58	32.60	32.64	32.39	32.21	32.08	31.69	31.09		31.97	32.18
1991		32.25	32.28	32.13	31.89	31.57	31.78	31.57	31.03	30.71	30.60	31.22	31.55
1992	31.52	31.59	32.40	32.50	32.27	32.14	31.52	31.14	31.01	31.15	31.28	31.59	31.68
1993	31.93	32.16	32.38	32.25	32.05	31.87	31.53	31.20	31.87	31.40	31.49	31.72	31.82
1994	32.02	32.13		32.46	32.26	32.14	31.91	31.19	30.38	30.97	31.35	31.74	31.69
1995		32.15		31.78	31.63	31.41	31.47	30.96	30.89	31.02	31.55	31.79	31.47
1996	32.01	32.01	32.24	32.28	32.30	32.15	32.02	32.11	30.96	30.95	31.28	31.64	31.83
1997	31.94			32.27	32.01	32.02	32.01	31.59	30.97	31.01	31.25	31.71	31.68
1998	31.87		32.23	32.24	31.98	31.97	31.71	32.08	31.27	31.15	31.43	31.88	31.80
1999	32.14		32.40	32.23	32.12	32.05	31.82	31.37	31.06	30.92	31.34	31.69	31.74

MONTHLY AVERAGE 30 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						32.40	32.02	31.35	31.16	31.12	31.57	31.90	31.65
1947			32.61		32.36	32.15	31.93			31.39	31.93		32.06
1948				32.62	32.56	32.34	32.22	32.34					32.42
1949						32.23		31.86	31.60			32.05	31.94
1950			32.69	32.82		32.29	32.21	32.05	31.55		31.65	31.74	32.13
1951	32.06	32.12	32.02	31.94	31.93	32.07	32.21	32.19	31.51	31.26			31.93
1952	32.16			32.41	32.31	32.44	32.21	32.04		30.88		31.74	32.02
1953		32.05		32.09	32.06	32.06	31.94	31.97	31.46	31.49	31.58	31.93	31.86
1954	32.24	32.21	32.07		32.50	32.35	32.24	32.40		31.61	31.75	32.15	32.15
1955	32.21	32.49		32.12		32.07	31.95	31.59	31.22	31.43	31.54	31.85	31.85
1956	31.93	32.15	32.28	32.27	32.28	32.16	32.31	32.45	31.80	31.43	31.63	31.77	32.04
1957	31.96		32.57		31.95	31.71	31.77	32.21	31.32	30.92	31.24	31.76	31.74
1958		32.20	32.12	32.11	32.18	32.10	31.76	31.36		31.16	31.36	31.90	31.83
1959	32.29	32.60	32.76	32.74	32.45	32.13	32.16	31.94		31.10	31.45	31.69	32.12
1960	31.92	32.01	32.22	32.25	32.10	32.20	32.36	32.14	31.04	31.33	31.45	31.82	31.90
1961	32.06	32.32	32.42		31.81	32.44	32.37	32.08	31.47	31.31	31.41		31.97
1962	32.01	32.37	32.39		32.28	32.23	32.31	32.35	31.55	31.30	31.34		32.01
1963	32.06	32.34	32.54	32.55	32.47	32.35	32.37	32.41	31.54	31.15	31.37	31.79	32.08
1964	31.89	32.35	32.61	32.68	32.60	32.63	32.55	32.06	31.35	31.62	31.83	31.94	32.18
1965	32.11	32.35	32.32	32.33	32.30	31.92	32.40	32.42	32.17	31.60	31.89	32.06	32.16
1966		32.46	32.44	32.28	32.39	32.25	32.43	32.26	31.59	31.76	31.69	31.66	32.11
1967	31.68	32.08	32.40	32.39	32.32	32.24	32.36	32.38	31.83	31.45	31.78	32.06	32.08
1968	32.21	32.25	32.34	32.31	32.33	32.36	31.97	31.86	31.25	31.10	31.45	31.79	31.94
1969	32.20	32.20	32.25	32.25	32.23	32.19	32.20	32.14	31.63	31.38	31.70	31.76	32.01
1970	31.93	31.95	32.01	32.06	32.03	31.80	31.73	31.48		30.87	30.73	31.39	31.63
1971	31.98	31.98	32.20	32.23	32.18	32.20	32.05	31.50	31.04	31.01	31.41	31.74	31.79
1972	31.99	32.34	32.56	32.62	32.48	32.44	32.38	31.58	31.21	31.07	31.39		32.01
1973	32.19	32.27	32.46	32.51	32.23	32.33	32.24	31.82	31.01	31.10	31.68	31.83	31.97
1974	32.02	32.34	32.57	32.68	32.66	31.98	31.78	32.07	31.04	30.34	30.79		31.84
1975	32.00	32.32			32.44	32.47	32.31	32.14		31.51	31.53	31.89	32.07
1976	32.06	32.23	32.40	32.52	32.52	32.40	32.22	31.95	31.44	31.26	31.72	31.94	32.06
1977	32.24	32.52	32.48	32.55	32.61	32.24	32.37	31.65	31.38	30.73	31.33	31.80	31.99
1978	32.09	32.32	32.33	32.43	32.33	32.72	32.52	32.09	31.11		31.87		32.18
1979	32.25		32.47	32.59	32.32	32.50	32.61	32.17	31.27	31.33	31.42	31.75	32.06
1980	31.95		32.37	32.46	32.36	32.40	32.51	32.04	31.30				32.17
1981	32.02		32.35	32.32	32.43	32.42	32.52		31.52	31.14	31.35	31.61	31.97
1982	32.25	32.49	32.69	32.71	32.65	32.40	32.65		31.78	31.24	31.20		32.21
1983		32.20		32.45	32.33	32.66	32.32	31.94	31.32	30.79	31.07	31.50	31.86
1984	31.80	31.96		32.24	32.24	32.31	31.98	31.77	31.39	30.78	31.02	31.66	31.74
1985	32.02	32.23	32.48	32.55	32.61	32.57	32.57	32.35	30.98	30.69	31.38		32.04
1986	32.02	32.35	32.47	32.44	32.37	32.37	32.12	32.16	31.48	31.30	31.50	31.97	32.05
1987	32.23	32.32		32.52	32.54	32.27	32.18	32.11	32.03	31.64	31.63	31.76	32.11
1988		32.33		32.52	32.42	32.53	32.82	32.61	31.55	31.53	32.01	31.63	32.20
1989		32.24		32.70	32.82	32.73	32.45	32.21	31.87	31.72	31.71	32.11	32.26
1990	32.25	32.57	32.64	32.62	32.66	32.50	32.43	32.60	32.16	31.30		32.01	32.34
1991		32.25	32.29	32.23	32.09	31.94	32.18	32.14	31.11	31.33	30.66	31.27	31.77
1992	31.54	31.61	32.44	32.56	32.31	32.24	31.74	31.55	31.28	31.24	31.42	31.60	31.79
1993	32.00	32.29	32.43	32.32	32.12	32.05	31.72	31.83	31.87	31.74	31.50	31.73	31.97
1994	32.02	32.13		32.48	32.38	32.46	32.37	32.15	30.70	31.00	31.51	31.83	31.91
1995		32.21		32.11	31.87	32.10	31.95	31.72	31.26	31.51	31.67	31.84	31.82
1996	32.02	32.02	32.28	32.32	32.34	32.26	32.07	32.06	31.10	31.08	31.50	31.68	31.89
1997	31.98			32.31	32.10	32.21	32.26	32.41	31.77	31.12	31.28	31.75	31.92
1998	31.87		32.24	32.31	32.13	32.11	32.09	32.43	31.73	31.34	31.56	31.94	31.98
1999	32.23		32.44	32.25	32.30	32.29	32.30	32.14	31.45	31.17	31.39	31.71	31.97

MONTHLY AVERAGE 50 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						32.67	32.48	32.10	32.05	31.51	31.84	32.08	32.10
1947			32.66		32.52	32.53	32.32		31.86	31.43	32.02		32.19
1948				32.78	32.64	32.77	32.61	32.67					32.69
1949						32.45		32.71	32.23			32.16	32.39
1950				32.89		32.67	32.92	32.73	32.68		31.98	32.05	32.56
1951	32.27		32.20	32.19	32.19	32.58	32.51	32.53		32.20			32.33
1952	32.36			32.53	32.71	32.88	32.84	32.56		31.74		31.83	32.43
1953		32.12		32.49	32.73	32.74	32.60	32.35	31.87	31.62	31.66	32.06	32.22
1954	32.25	32.29	32.25	32.38	32.57	32.68	32.76	32.87	32.81	32.13	31.81	32.24	32.42
1955	32.31	32.55		32.20	32.45	32.71	32.83	32.52	32.03	31.82	31.90	32.06	32.31
1956	32.25	32.28	32.29	32.40	32.53	32.69	32.69	32.70	32.30	31.64	31.72	31.83	32.29
1957	32.11	32.43	32.49	32.45	32.48	32.38	32.41	32.70	32.15	31.80	31.73	31.84	32.25
1958		32.37	32.18	32.24	32.46	32.46	32.43	32.30	31.89	31.64	31.58	31.99	32.14
1959		32.71	32.77	32.80	32.66	32.43	32.46	32.38		31.62	31.68	31.71	32.32
1960	31.91		32.30	32.37	32.43	32.43	32.48	32.40	32.06	31.93	31.59	31.99	32.17
1961	32.09	32.33	32.45		32.35	32.67	32.63	32.45	31.94	31.84	31.69		32.24
1962	32.04	32.41	32.43		32.42	32.56	32.59	32.68	32.20	31.95	31.80		32.31
1963	32.15	32.38	32.55	32.61	32.62	32.74	32.78	32.66	32.31	31.66	31.93	31.91	32.36
1964	31.90	32.35	32.61	32.74	32.68	32.85	32.90	32.76	32.30	32.09	31.94	32.21	32.44
1965	32.19	32.35	32.32	32.49	32.45	32.41	32.65	32.74	32.35	31.90	32.04	32.11	32.33
1966		32.60	32.50	32.34	32.53	32.36	32.55	32.57	32.23	32.02	31.75	31.65	32.28
1967	31.81	32.28	32.41	32.45	32.57	32.63	32.74	32.68	32.27	31.85	32.17	32.19	32.34
1968	32.24	32.27	32.39	32.39	32.38	32.45	32.35	32.28	31.84	31.11	31.44	31.89	32.09
1969	32.24	32.20	32.28	32.29	32.36	32.42	32.46	32.55	32.15	31.54	31.87	32.25	32.22
1970	32.24	32.21	32.16	32.12	32.27	32.36	32.50	32.52		30.90	31.00	31.44	31.97
1971	32.12	32.04	32.31	32.27	32.39	32.45	32.28	32.12	31.86	31.37	31.56	31.78	32.05
1972	32.00	32.35	32.63	32.66	32.58	32.64	32.71	32.61	32.22	32.18	31.84		32.40
1973	32.35	32.37	32.47	32.58	32.54	32.64	32.60	32.46	31.64	31.70	32.08	31.85	32.27
1974	32.03	32.38	32.57	32.69	32.74	32.57	32.57	32.67	32.20	30.57	31.13		32.19
1975	32.19	32.44			32.53	32.51	32.56	32.60	32.70	31.93	31.84	32.07	32.34
1976	32.24	32.29	32.43	32.64	32.62	32.54	32.52	32.44	32.10	31.54	31.81	31.97	32.26
1977	32.30	32.52	32.52	32.59	32.81	32.74	32.67	32.40	31.79	31.67	31.60	31.90	32.29
1978	32.15	32.41	32.65	32.58	32.61	32.88	32.69	32.48	31.40		31.98		32.38
1979	32.28	32.53	32.53	32.62	32.43	32.72	32.80	32.62	31.80	31.92	31.65	31.81	32.31
1980	32.01		32.43	32.51	32.48	32.65	32.71	32.43	31.78				32.38
1981	32.04		32.42	32.48	32.61	32.59	32.62		32.19	31.48	31.54	31.74	32.17
1982	32.38	32.51	32.72	32.82	32.79	32.81	32.89		32.35	31.87	31.24		32.44
1983		32.21		32.69	32.55	32.85	32.76	32.59	32.24	31.17	31.27	31.61	32.19
1984	31.90	32.17		32.27	32.45	32.64	32.73	32.20	31.98	31.09	31.24	31.97	32.06
1985	32.15	32.34	32.54	32.59	32.68	32.72	32.79	32.73	32.39	31.11	31.59		32.33
1986	32.12	32.46	32.52	32.50	32.51	32.59	32.54	32.46	32.03	31.46	31.63	32.02	32.24
1987	32.23	32.39		32.77	32.86	32.69	32.58	32.41	32.27	32.21	32.03	31.76	32.38
1988		32.46		32.63	32.62	32.84	33.02	32.91	32.52	32.32	32.20	31.71	32.52
1989	32.05	32.31		32.80	32.92	32.89	32.78	32.68	32.23	32.14	31.93	32.18	32.45
1990	32.27	32.58	32.67	32.74	32.71	32.71	32.72	32.74	32.54	31.80		32.10	32.51
1991		32.26	32.30	32.34	32.39	32.30	32.53	32.49	31.87	32.34	31.46	31.50	32.16
1992	31.84	31.87	32.50	32.65	32.45	32.55	32.37	32.43	32.19	31.83	31.67	31.68	32.17
1993	32.16	32.40	32.53	32.47	32.24	32.49	32.22	32.56	32.50	32.07	31.81	31.73	32.27
1994	32.04	32.12		32.48	32.47	32.64	32.66	32.63	31.86	31.40	31.76	31.95	32.18
1995		32.28		32.33	32.21	32.49	32.53	32.46	32.09	32.11	32.01	31.91	32.24
1996	32.07	32.07	32.37	32.36	32.47	32.43	32.36	32.42	31.78	31.67	31.75	31.78	32.13
1997	32.04			32.39	32.42	32.54	32.59	32.67	32.38	32.31	31.94	31.89	32.32
1998	31.91		32.27	32.45	32.38	32.45	32.62	32.68	32.37	31.97	31.95	32.06	32.28
1999	32.23		32.52	32.37	32.47	32.56	32.52	32.43	32.07	31.82	31.65	31.87	32.23

MONTHLY AVERAGE 75 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			32.59		32.69	32.65	32.50						32.61
1948				32.81	32.81	32.90	32.76	32.72					32.80
1949						32.88		32.88	32.68			32.32	32.69
1950			32.84	32.96		32.92	33.14	33.12	32.72		32.28	32.29	32.78
1951	32.39	32.26	32.33	32.40	32.49	32.74	32.79	32.70	32.63	32.43			32.52
1952	32.53			32.72	32.94	33.10	33.07	32.90	32.60	32.44		32.23	32.73
1953		32.41		32.70	32.86	32.87	32.77	32.54	32.21	32.21	31.87	32.25	32.47
1954	32.41	32.29	32.36	32.40	32.63	32.75	32.97	33.00	32.94	32.57	32.09	32.39	32.57
1955	32.38	32.59		32.38	32.60	32.82	33.02	32.93	32.66	32.34	32.24	32.25	32.56
1956	32.47	32.42	32.45	32.49	32.64	32.85	32.88	32.81	32.68	32.44	32.21	32.42	32.56
1957	32.36	32.49	32.54	32.55	32.75	32.77	32.67	32.90	32.67	32.60	32.24	32.19	32.56
1958	32.16	32.38	32.36	32.47	32.64	32.72	32.66	32.61	32.33	32.25	31.93	32.07	32.38
1959	32.55	32.71	32.79	32.84	32.76	32.70	32.76	32.69	32.36	32.38	32.23	31.91	32.56
1960	32.10	32.22	32.34	32.42	32.53	32.57	32.62	32.60	32.60	32.36	32.11	32.32	32.40
1961	32.34	32.37	32.48		32.65	32.79	32.83	32.63	32.31	32.25	32.17		32.48
1962	32.43	32.51	32.50		32.61	32.83	32.82	32.88	32.73	32.57	32.49		32.64
1963	32.34	32.42	32.59	32.65	32.74	32.82	32.86	32.84	32.61	32.33	32.35	32.26	32.57
1964	31.97	32.52	32.65	32.80	32.78	32.95	33.03	33.01	32.90	32.60	32.11	32.55	32.66
1965	32.48	32.39	32.44	32.69	32.67	32.59	32.84	32.86	32.70	32.52	32.46	32.28	32.58
1966		32.63	32.60	32.45	32.68	32.51	32.76	32.77	32.68	32.58	32.28	32.12	32.55
1967	32.03	32.38	32.51	32.52	32.77	32.77	32.82	32.83	32.54	32.37	32.42	32.29	32.52
1968	32.27	32.42	32.56	32.50	32.51	32.50	32.52	32.59	32.47	32.44	32.04	32.06	32.41
1969	32.35	32.33	32.41	32.39	32.51	32.58	32.67	32.68	32.64	32.17	32.35	32.51	32.47
1970	32.32	32.36	32.37	32.26	32.43	32.52	32.70	32.67		31.94	31.94	31.78	32.30
1971	32.28	32.37	32.56	32.55	32.56	32.57	32.59	32.38	32.28	31.72	32.17	31.98	32.33
1972	32.02	32.37	32.72	32.71	32.66	32.79	32.96	32.84	32.76	32.41	32.18		32.58
1973	32.48	32.47	32.57	32.72	32.81	32.78	32.82	32.80	32.45	32.55	32.59	32.09	32.59
1974	32.07	32.45	32.65	32.83	32.88	32.94	32.87	32.92	32.79	32.67	32.38		32.68
1975	32.25	32.47			32.57	32.59	32.72	32.76	32.76	32.23	32.19	32.24	32.48
1976	32.40	32.34	32.51	32.68	32.73	32.72	32.65	32.61	32.40	32.27	31.95	32.03	32.44
1977	32.33	32.60	32.56	32.66	32.90	32.89	32.98	32.77	32.73	32.47	32.20	31.99	32.59
1978	32.29	32.48	32.64	32.60	32.79	32.92		32.84	32.52	32.82	32.53		32.64
1979	32.57	32.78	32.70		32.76	32.87	32.90	32.85	32.78	32.72	32.20	31.92	32.64
1980	31.94		32.55	32.63	32.72	32.74	32.84	32.75	32.55				32.59
1981	32.42		32.54	32.55	32.76	32.76	32.72		32.54	32.20	32.05	32.16	32.47
1982	32.54	32.54	32.77	32.88	32.93	32.95	32.98		32.69	32.33	31.58		32.62
1983		32.28		32.82	32.75	32.94	32.92	32.82	32.63	32.48	32.17	31.83	32.56
1984	32.02	32.37		32.32	32.64	32.84	32.92	32.66	32.60	32.35	31.89	32.18	32.44
1985	32.26	32.43	32.60	32.63	32.77	32.84	32.89	32.87	32.82	32.47	32.20		32.62
1986	32.25	32.49	32.57	32.53	32.62	32.64	32.63	32.61	32.47	32.13	32.38	32.13	32.45
1987	32.30	32.53		32.87	32.97	32.91	32.82	32.66	32.64	32.48	32.33	31.90	32.58
1988		32.58		32.73	32.79	32.99	33.08	33.03	32.83	32.68	32.34	31.95	32.70
1989	32.23	32.38		32.86	33.00	33.01	32.99	32.93	32.64	32.64	32.33	32.31	32.67
1990	32.30	32.61	32.72	32.79	32.78	32.85	32.92	32.85	32.72	32.46		32.25	32.66
1991		32.28	32.35	32.55	32.75	32.62	32.79	32.70	32.49	32.64	32.35	31.80	32.48
1992	31.92	32.02	32.57	32.70	32.57	32.68	32.71	32.70	32.59	32.29	32.25	32.05	32.42
1993	32.41	32.52	32.58	32.57	32.66	32.81	32.69	32.82	32.78	32.54	32.29	31.88	32.55
1994	32.13	32.17		32.58	32.64	32.74	32.79	32.80	32.39	31.86	32.26	32.19	32.41
1995		32.47		32.53	32.43	32.62	32.71	32.76	32.44	32.50	32.43	32.17	32.51
1996	32.16	32.36	32.49	32.41	32.54	32.57	32.58	32.56	32.23	32.33	32.15	31.96	32.36
1997	32.20			32.45	32.60	32.74	32.80	32.82	32.70	32.72	32.54	32.16	32.57
1998	32.13		32.52	32.58	32.53	32.68	32.72	32.74	32.63	32.63	32.50	32.32	32.54
1999	32.47		32.65	32.56	32.64	32.70	32.67	32.61	32.44	32.27	32.18	32.10	32.48

MONTHLY AVERAGE 100 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						32.93	32.77	32.77	32.73	32.70	32.37	32.11	32.63
1947			32.59		32.78	32.74	32.65		32.49	32.59	32.59		32.63
1948				32.84	32.91	33.00	32.93	32.92					32.92
1949						32.98		33.03	33.00			32.65	32.92
1950				33.10		33.09	33.23	33.19	32.93		32.52	32.62	32.95
1951	32.63	32.44	32.45	32.60	32.75	32.87	32.97		32.81	32.69			32.69
1952	32.68			32.89	33.08	33.43	33.23	33.07		32.60		32.52	32.94
1953		32.57		32.92	33.02		32.99	32.85		32.78	32.54	32.49	32.77
1954	32.74	32.58	32.57	32.62	32.70	32.95	33.15	33.10	33.09	32.89	32.57	32.60	32.80
1955	32.44	32.63		32.67	32.75	32.92	33.08	33.07	32.98		32.64	32.46	32.76
1956	32.51	32.62	32.52	32.64		32.97	32.96	32.92	32.86	32.67	32.44	32.45	32.69
1957	32.44	32.60	32.62	32.70	32.91	32.92	32.85	33.02	32.79	32.73	32.63	32.47	32.72
1958	32.26	32.50	32.55	32.66	32.80	32.81	32.82	32.75	32.62	32.47	32.42	32.42	32.59
1959	32.69	32.80	32.86	32.86	32.87	32.85	32.83	32.84	32.74	32.82	32.64	32.18	32.75
1960	32.28	32.34	32.46	32.55	32.62	32.58	32.71	32.69	32.76	32.64	32.54	32.46	32.55
1961	32.46	32.45	32.48		32.78	32.89	32.93	32.76	32.62	32.53	32.51		32.64
1962	32.65	32.62	32.51		32.85	32.97	32.96	32.96	32.73	32.86	32.76		32.79
1963	32.59	32.47	32.61	32.71	32.84	32.93	32.97	32.90	32.81	32.71	32.62	32.55	32.73
1964		32.88	32.80	32.89	32.88	33.02	33.10	33.13	33.06	32.98	32.41	32.68	32.89
1965	32.74	32.49	32.50	32.75	32.76	32.87	32.98	32.93	32.87	32.80	32.76	32.90	32.78
1966		32.66	32.73	32.74	32.81	32.76	32.89	32.88	32.78	32.74	32.73	32.47	32.74
1967	32.24	32.45	32.65	32.67	32.86	32.87	32.86	32.84	32.71	32.67	32.66	32.48	32.66
1968	32.35	32.53	32.69	32.63	32.72	32.77	32.79	32.76	32.78	32.74	32.71	32.46	32.66
1969	32.55	32.45	32.65	32.49	32.63	32.67	32.77	32.77	32.71	32.61	32.65	32.73	32.64
1970	32.44	32.62	32.57	32.55	32.61	32.67	32.79	32.73		32.52	32.44	31.99	32.54
1971	32.32	32.63	32.73	32.72	32.68	32.68	32.71	32.62	32.49		32.53	32.22	32.58
1972	32.26	32.56	32.74	32.72	32.78	32.85	33.00	32.99	32.87	32.54	32.36		32.70
1973	32.52	32.68	32.72	32.81	32.84	32.87	32.99	32.98	32.76	32.85	32.91	32.53	32.79
1974	32.21	32.58	32.73	32.90	32.99	33.01	33.09	33.03	33.02	32.83	32.85		32.84
1975	32.42	32.60			32.62	32.64	32.82	32.91	32.94	32.49	32.47	32.28	32.62
1976	32.52	32.51	32.62	32.73	32.74	32.86	32.80	32.81	32.72	32.84	32.62	32.40	32.68
1977	32.68	32.76	32.62	32.76	32.97	32.93	33.06	32.88	32.82	32.77	32.75	32.34	32.78
1978	32.45	32.66	32.62	32.78	32.87	33.03		32.92	32.79	33.09	32.76		32.80
1979	32.81	32.92	32.88	32.87	32.78	33.01	33.01	32.96	32.96	32.94	32.86	32.34	32.86
1980	32.33		32.82	32.87	32.87	32.94	32.93	32.89	32.86				32.81
1981	32.66		32.60	32.67	32.87	32.87	32.81		32.71	32.54	32.40	32.58	32.67
1982	32.73	32.62	32.82	32.91	32.98	33.01	33.04		32.80	32.82			32.86
1983		32.40		32.91	32.80	33.04	33.00	32.94	32.93	32.80	32.74	32.15	32.77
1984	32.25	32.49		32.52	32.88	32.97	33.02	32.87	32.92	32.84	32.45	32.33	32.69
1985	32.37	32.50	32.64	32.74	32.87	32.89	32.97	32.96	32.92	32.83	32.71		32.76
1986	32.52	32.59	32.65	32.60	32.67	32.68	32.71	32.67	32.73	32.65	32.61	32.32	32.62
1987	32.36	32.65		32.91	33.04	33.03	32.99	32.89	32.83	32.72	32.57	32.44	32.77
1988		32.76		32.84	32.92	33.12	33.16	33.11	32.97	32.87	32.44	32.36	32.86
1989	32.55	32.46		33.02	33.07	33.08	33.11	33.11	32.89	32.85	32.61	32.32	32.82
1990	32.42	32.66	32.78	32.87	32.85	32.96	33.01	32.95	32.87	32.79		32.38	32.78
1991		32.29	32.44	32.63	32.87	32.83	32.88	32.80	32.56	32.74	32.63	32.30	32.63
1992	32.11	32.21	32.65	32.81	32.65	32.75	32.78	32.76	32.71	32.71	32.67	32.35	32.60
1993	32.54	32.68	32.68	32.69	32.82	32.96	32.86	32.89	32.89	32.84	32.70	32.23	32.73
1994	32.32	32.41		32.75	32.74	32.81	32.84	32.95	32.72	32.58	32.47	32.44	32.64
1995		32.61		32.68	32.66	32.79	32.85	32.89	32.71	32.76	32.74	32.40	32.71
1996	32.34	32.53	32.65	32.47	32.63	32.67	32.67	32.67	32.48	32.56	32.50	32.26	32.54
1997	32.45			32.55	32.73	32.87	32.88	32.88	32.82	32.84	32.66	32.31	32.70
1998	32.48		32.59	32.71	32.71	32.81	32.80	32.82	32.79	32.78	32.82	32.55	32.71
1999	32.67		32.75	32.81	32.76	32.81	32.75	32.72	32.65	32.52	32.53	32.40	32.67

MONTHLY AVERAGE 125 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									32.67	32.73			32.70
1950									33.04			32.70	32.87
1951						33.06							33.06
1957				32.84									32.84
1964			32.99	33.03	32.99	33.12		33.18	33.14	33.13	33.07		33.08
1965	32.86	32.76	32.82	32.91	32.87	32.93	33.04	33.04	32.96	32.98	32.95	33.03	32.93
1966		32.87	32.82	32.91	32.92	32.90	32.99	32.97	32.95	33.00	33.00	32.71	32.91
1967	32.63	32.62	32.87	32.75	32.94	32.92	32.95	32.90	32.82	32.86	32.93	32.63	32.82
1968	32.51	32.65	32.82	32.77	32.92	32.91	32.97	32.95	32.98	33.02	33.05	32.76	32.86
1969	32.82	32.83	32.85	32.60	32.75	32.84	32.83	32.87	32.95	32.94	32.76	32.86	32.83
1970	32.60	32.85	32.71	32.63	32.77	32.77	32.90	32.78		32.70	32.60		32.73
1971	32.55	32.76	32.85	32.79	32.73	32.76	32.80	32.73	32.65	32.54	32.84	32.40	32.70
1972	32.47	32.80	32.82	32.84	32.93	32.99	33.05	33.03	32.95	32.76	32.68		32.85
1973	32.67	32.77	32.85	32.91	32.93	32.99	33.08	33.09	32.99	33.03	33.02	32.66	32.92
1974	32.49	32.63	32.77	32.95	33.07	33.12	33.12	33.07	33.07	33.02	32.99		32.94
1975	32.61	32.79			32.74	32.82	32.91	33.02	33.15	32.78	32.82	32.54	32.82
1976	32.75	32.69	32.70	32.80	32.87	32.98	32.95	32.98	32.98	33.06	33.01	32.93	32.89
1977	32.94	32.85	32.81	32.90	33.05	33.04	33.07	32.97	32.91	33.19	33.04	32.69	32.96
1978	32.77	32.90	32.90	32.87	32.98	33.08	32.93	33.01	32.94		32.83		32.92
1979	33.01	33.05		33.10	32.96	33.09	33.08	33.05	33.11	33.19	33.11	32.77	33.05
1980	32.57		32.92	32.92	33.10	33.02	33.02	33.00	33.00				32.94
1981	32.94		32.52	32.80	32.95	32.96	32.87		32.80	32.72	32.73	32.83	32.81
1982	32.90	32.91	32.89	32.94	33.04	33.08	33.10		32.93	32.94	32.33		32.91
1983		32.52					33.06	33.01	33.06	32.89	32.95	32.49	32.85
1984	32.52	32.71		32.60	32.97	33.05	33.09	32.97	33.11	33.02	32.89	32.48	32.86
1985	32.51	32.65	32.73	32.82	32.96	33.02	33.04	33.01	32.99	32.89	32.95		32.87
1986	32.77	32.68	32.70	32.65	32.69	32.73	32.74	32.74	32.94	32.95	32.90	32.60	32.76
1987	32.47	32.80		33.02	33.11	33.08	33.09	33.01	33.02	32.92	32.76	32.73	32.91
1988		32.91		32.91	33.05	33.21	33.22	33.19	33.06	32.97	32.47	32.51	32.95
1989	32.65	32.68		33.09	33.15	33.21	33.17	33.22	33.08	33.10	33.00	32.66	33.00
1990	32.78	32.81	32.91	32.94	32.92	33.00	33.07	33.03	33.00	32.94		32.66	32.91
1991		32.33	32.52	32.69	32.93	32.92	32.95	32.89	32.75	32.84	32.76	32.57	32.74
1992	32.34	32.38	32.70	32.89	32.72	32.81	32.83	32.82	32.79	32.84	32.91	32.61	32.72
1993	32.67	32.76	32.75	32.79	32.90	33.06	32.97	33.02	32.96	32.98	32.94	32.36	32.85
1994	32.53	32.58		32.80	32.82	32.85	32.89	33.01	32.84	32.86	32.70	32.68	32.78
1995		32.71		32.82	32.80	32.91	32.92	32.96	32.85	32.89	32.89	32.61	32.84
1996	32.55	32.68	32.78	32.58	32.74	32.79	32.77	32.77	32.62	32.75	32.67	32.60	32.69
1997	32.69			32.63	32.85	32.96	32.96	32.93	32.92	32.96	32.83	32.57	32.83
1998	32.80		32.67	32.84	32.81	32.91	32.88	32.89	32.90	32.92	32.95	32.80	32.85
1999	32.80		32.93	32.92	32.88	32.88	32.83	32.79	32.76	32.72	32.73	32.55	32.80

MONTHLY AVERAGE 150 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							32.99	33.11	33.02	33.07	32.95	32.86	33.00
1947			32.61		32.90	32.91	32.84		32.78	32.95	33.04		32.86
1948				33.08	33.07	33.17	33.14	33.19					33.13
1949						33.00		33.16	33.19			33.10	33.11
1950			33.03	33.18		33.26	33.34	33.32	33.33		33.30	32.94	33.21
1951	32.92	32.86	32.75	32.89	33.03	33.20	33.25	33.05	33.27	33.02			33.02
1952	33.21			33.10	33.23	33.46	33.22	33.19	33.02	32.84		32.84	33.12
1953		32.88		33.37	33.33	33.22	33.18	33.01	32.87	33.08	33.09	32.84	33.09
1954	33.04	32.92	32.91	33.01	32.96	33.16	33.30	33.21	33.17	33.14	33.17	33.24	33.10
1955		33.08		33.01	33.01	33.06	33.22	33.15	33.21		33.14	32.97	33.09
1956	32.88	33.04	32.97		32.78	33.12	33.12	33.02	32.94	32.94	33.04	32.91	32.98
1957	33.03	32.96	32.89	32.97	33.18	33.11	33.07	33.19	33.09	33.25	33.15	33.07	33.08
1958	33.10	33.18	33.01	33.01	33.02	33.01	32.96	32.94	32.87	32.96	32.97	32.76	32.98
1959	32.95	32.87	33.00	32.99	33.00	32.98	32.97	32.96	33.03	33.04	33.00	32.86	32.97
1960	32.71	32.60	32.76	32.89	32.82	32.82	32.90	32.80	33.13	32.95	32.94	32.80	32.84
1961	32.75	32.65	32.68		33.05	33.10	33.06	33.01	32.94	33.07	33.03		32.93
1962	33.20	32.99	32.74		33.12	33.16	33.17	33.15	33.00	33.26	33.26		33.11
1963	32.92	33.11	32.90	32.87	33.11	33.15	33.07	33.00	33.00	33.05	33.11	32.91	33.02
1964		32.97	33.08	33.14	33.04	33.18	33.16	33.22	33.16	33.20	33.35	33.36	33.17
1965	33.05	32.81	33.06	33.01	32.95	32.98	33.09	33.12	33.06	33.11	33.14	33.12	33.04
1966		33.11	33.02	33.01	33.03	33.10	33.19	33.17	33.33	33.22	33.22	32.98	33.13
1967	32.97	33.18	33.09	32.86	33.00	33.05	33.02	33.00	32.94	33.13	33.16	32.83	33.02
1968	32.69	32.89	32.94	32.94	33.10	33.07	33.11	33.09	33.18	33.20	33.28	33.24	33.06
1969	33.21	32.88	33.01	32.98	32.97	32.93	32.99	33.06	33.16	33.15	32.92	33.00	33.02
1970	32.79	33.01	32.87	32.76	32.95	32.91	33.14	32.93		32.85	32.77	32.48	32.86
1971	32.74	32.92	33.01	32.85	32.80	32.87	32.96	32.84	32.96	32.75	33.01	32.85	32.88
1972	32.86	33.03	32.94	32.95	32.95	33.01	33.13	33.12	33.06	32.98	33.01		33.00
1973	32.67	32.85	32.97	33.02	33.03	33.08	33.13	33.13	33.06	33.20	33.13	32.78	33.00
1974	32.56	32.73	32.86	32.96	33.11	33.15	33.20	33.11	33.16	33.13	33.13		33.01
1975	32.71	33.06			32.80	32.96	33.08	33.19	33.34	32.96	33.11	33.06	33.03
1976	33.06	32.84	32.80	32.90	32.99	33.16	33.08	33.05	33.11	33.14		33.08	33.02
1977	33.10	33.02	33.00	32.99	33.16	33.14		32.88	33.00	33.11	33.16	33.00	33.05
1978	33.06	32.95		32.94	33.08	33.17	32.95	33.14	33.12	33.31	33.07		33.08
1979	33.10	33.07	33.15	33.23	33.08	33.14	33.25	33.17	33.22	33.37	33.29	33.23	33.19
1980	33.36		33.14	33.10	33.13		33.11	33.17	33.12				33.16
1981	33.20		32.93	33.01	33.15	33.12	32.98		33.09	32.96	32.99	33.23	33.07
1982	33.21	33.13	32.99	33.04	33.13	33.17	33.22		33.13	33.09	32.84		33.10
1983		32.66		33.01	32.97	33.07	33.14		33.21	33.09	33.10	32.83	33.01
1984	32.78	32.83		32.86	33.06	33.16	33.10	33.17	33.18	33.17	33.08	32.81	33.02
1985	32.85	32.85	32.81	32.90	33.07	33.10	33.12	33.08	33.11	33.08	33.10		33.01
1986	32.95	32.87	32.78	32.74	32.76	32.83	32.80	32.87	33.13	33.27	32.94	33.01	32.91
1987	32.97	33.03		33.13	33.23	33.17	33.24	33.11	33.11	33.16	33.14	33.31	33.15
1988		33.04		33.05	33.17	33.33	33.33	33.33	33.20	33.21	32.74	32.80	33.12
1989	32.79	32.77		33.20	33.28	33.33	33.30	33.32	33.26	33.24	33.15	32.98	33.15
1990	33.07	33.05	32.98	33.00	32.99	33.08	33.16	33.11	33.10	33.00		33.05	33.05
1991		32.48	32.56	32.95	33.03	33.01	33.03	32.97	32.84	32.95	32.91	32.77	32.86
1992	32.49	32.53	32.72	32.96	32.84	32.89	32.91	32.89	32.90	33.08	33.01	33.08	32.86
1993	32.89	33.00	32.85	32.91	33.05	33.14	33.10	33.11	33.07	33.10	33.07	32.83	33.01
1994	32.76	32.77		32.87	32.88	32.88	32.95	33.12	32.95	33.11	32.96	32.88	32.92
1995		32.84		32.94	32.98	33.01	33.02	33.07	32.96	33.03	33.00	32.90	32.98
1996	32.79	32.82	32.89	32.80	32.88	32.91	32.91	32.90	32.84	32.99	32.82	32.77	32.86
1997	32.83			32.77	32.99	33.08	33.06	33.00	33.06	33.07	33.00	32.90	32.98
1998	33.08		32.83	32.92	32.91	33.05	32.98	32.95	33.02	33.18	33.17	32.96	33.00
1999	32.89		33.10	33.08	33.02	33.01	32.92	32.94	32.95	32.91	33.02	32.80	32.97

MONTHLY AVERAGE 175 METER SALINITIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												32.95	32.95
1947						32.99	32.91		33.10	33.59	33.56		33.23
1948				33.10	33.10	33.22	33.32	33.51					33.25
1949						33.30		33.37	33.30				33.32
1950			33.05	33.17			33.41	33.41	33.38		33.35	33.31	33.30
1951		32.94	32.98	33.10	33.14	33.31	33.27	33.21	33.42	33.31			33.19
1952	33.33			33.26	33.42	33.54	33.36	33.37	33.34	33.21		33.00	33.31
1953		32.85		33.39	33.31	33.32	33.39	33.19	33.22	33.33	33.33	33.20	33.25
1954	33.23	33.08	33.08		33.16	33.33	33.41	33.31	33.37	33.41	33.39	33.41	33.29
1955	33.31	33.24		33.14	33.22	33.19	33.26	33.22		33.28	33.37	33.14	33.24
1956	33.24	33.32	33.06		33.00	33.20	33.20	33.13	33.29	33.28	33.12	33.20	33.19
1957		33.06	32.97		33.28	33.33	33.27	33.34	33.16	33.40	33.35	33.29	33.25
1958	33.25	33.29	33.17	33.12	33.22	33.21	33.08	33.05	33.12	33.32	33.23		33.19
1959	33.27	32.96	33.02	33.08	33.04	33.00	33.03	33.05	33.14	33.18	33.06	33.01	33.07
1960	32.99	33.03	32.87	32.97	33.12	33.06	33.17	33.02	33.29	33.17	33.31	33.11	33.09
1961	32.92	32.77	32.86		33.15	33.16	33.18	33.10	33.14	33.16	33.17		33.06
1962	33.22	33.09	32.88		33.23	33.30	33.30	33.25	33.15	33.50	33.40		33.23
1963	33.29	33.22	33.13	33.03	33.18	33.25	33.20	33.14	33.17	33.15	33.23	32.97	33.16
1964		33.06	33.16	33.18	33.14	33.29	33.30	33.30	33.28	33.33	33.43	33.37	33.26
1965	33.11	32.98	33.22	33.15	33.06	33.17	33.26	33.22	33.17	33.40	33.27	33.17	33.18
1966		33.16	33.29	33.24	33.19	33.35	33.40	33.38	33.53	33.58	33.54	33.32	33.36
1967	33.38	33.16	33.14	32.92	33.10	33.11	33.13	33.11	33.15	33.35	33.33	33.12	33.17
1968	32.96	33.20	33.10	33.19	33.32	33.11	33.29	33.29	33.33	33.39	33.37	33.30	33.24
1969	33.35	33.04	33.04	33.03	33.08	33.10	33.04	33.21	33.36	33.35	33.27	33.24	33.18
1970	33.33	33.30	33.09	32.97	33.07	33.06	33.24	33.04		33.14	33.12	32.87	33.11
1971	32.87	33.06	33.20	33.02	32.93	32.98	33.03	33.00	33.09	32.99	33.24	33.12	33.04
1972	33.15	33.16	33.06	32.97	33.11	33.12	33.15	33.19	33.15	33.11	33.20		33.12
1973	33.06	32.94	33.08	33.03	33.08	33.13	33.23	33.24	33.24	33.31	33.39	33.02	33.15
1974	32.74	32.94	32.98	33.06	33.12	33.31	33.27	33.27	33.27	33.28	33.32		33.14
1975	32.99	33.12			32.85	32.98	33.19	33.25	33.39	33.09	33.25	33.25	33.14
1976	33.24	33.04	32.96	33.20	33.13	33.19	33.26	33.14	33.13	33.21	33.59	33.37	33.21
1977	33.25	33.15	33.04	33.11	33.26	33.22	33.21	33.09	33.12	33.16	33.18	33.11	33.16
1978	33.15	33.17		33.04	33.26	33.22	33.03		33.26	33.36	33.26		33.19
1979	33.30	33.24	33.40	33.38	33.32	33.44	33.32	33.34	33.41	33.56	33.46	33.39	33.38
1980	33.66		33.36	33.22	33.23	33.26	33.24	33.37	33.51				33.36
1981	33.23		33.15	33.20	33.26	33.20	33.20		33.23	33.21	33.43	33.42	33.25
1982	33.39	33.17	33.24	33.28	33.27	33.24	33.28		33.43	33.17	33.14		33.26
1983		32.88		33.01		33.18	33.22	33.19	33.22	33.19	33.13	32.97	33.11
1984	33.00	32.90		33.00	33.15	33.19	33.35	33.27	33.29	33.23	33.14	32.97	33.14
1985	32.95	32.99	32.94	32.91	33.14	33.15	33.16	33.12	33.19	33.17	33.12		33.08
1986	33.19	33.00	32.89	32.77	32.83	32.86	32.92	33.16	33.25		33.09		33.00
1987	33.00	33.08		33.16	33.28	33.27	33.28	33.30	33.21	33.36	33.39		33.23
1988				33.12	33.25	33.35	33.38	33.38	33.28	33.27		33.12	33.27
1989		33.03		33.26	33.30	33.36	33.38	33.34	33.32	33.29	33.20	33.07	33.26
1990	33.20	33.15	33.03	33.05	33.04	33.16	33.21	33.22	33.24	33.17		33.11	33.14
1991		32.63	32.65	33.07	33.15	33.09	33.11	33.04	33.02	33.08	33.09	32.82	32.98
1992	32.72	32.76	32.86	33.02	32.97	32.98	33.07	33.16	33.06	33.24	33.52	33.24	33.05
1993	33.26	33.19	33.00	33.07	33.11	33.22	33.19	33.22	33.16	33.14	33.13	33.13	33.15
1994	33.04	32.90		32.92	32.96	32.93	33.01	33.27	33.07	33.27	33.28	33.14	33.07
1995		33.08		33.11	33.03	33.09	33.09	33.15	33.11	33.24	33.29	33.05	33.12
1996	33.02	33.05	33.02	32.92	32.98	33.03	33.06	33.06	33.06	33.07	33.01	32.94	33.02
1997	33.04			32.95	33.10	33.19	33.14	33.10	33.22	33.33	33.24	33.08	33.14
1998	33.31		32.94	33.06	33.05	33.25	33.15	33.07	33.21	33.34	33.34	33.20	33.17
1999	33.15		33.19		33.24	33.20	33.13	33.02	33.02	33.07	33.24	33.01	33.13

Appendix B-2. Monthly statistical summaries for salinity at standard depths.

MONTHLY STATISTICAL SUMMARY FOR SURFACE SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	43	31.97	0.19	0.03	31.19	32.26	-1.65	6.17
FEB	40	32.16	0.35	0.06	30.37	32.57	-3.57	18.03
MAR	38	32.33	0.22	0.04	31.82	32.68	-0.64	0.05
APR	48	32.20	0.33	0.05	31.45	32.67	-0.77	-0.07
MAY	50	32.08	0.37	0.05	30.98	32.72	-1.20	1.68
JUN	53	31.92	0.32	0.04	31.02	32.57	-0.93	0.84
JUL	53	31.61	0.36	0.05	30.44	32.16	-1.18	2.00
AUG	47	31.23	0.43	0.06	30.29	31.79	-0.63	-0.39
SEP	51	31.02	0.36	0.05	29.90	31.71	-0.69	0.64
OCT	49	31.06	0.31	0.04	30.18	31.55	-0.73	0.45
NOV	47	31.33	0.28	0.04	30.46	31.79	-1.02	1.42
DEC	43	31.73	0.20	0.03	31.06	32.07	-0.98	2.37

MONTHLY STATISTICAL SUMMARY FOR 10 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	37	31.97	0.17	0.03	31.41	32.23	-1.02	2.30
FEB	35	32.21	0.22	0.04	31.40	32.55	-1.57	3.98
MAR	32	32.36	0.17	0.03	31.88	32.78	-0.20	1.64
APR	37	32.30	0.24	0.04	31.65	32.70	-0.52	0.56
MAY	40	32.14	0.35	0.06	31.17	32.76	-0.93	0.80
JUN	41	31.95	0.32	0.05	31.16	32.57	-0.72	0.26
JUL	41	31.70	0.34	0.05	30.79	32.18	-0.79	0.19
AUG	39	31.29	0.40	0.06	30.40	31.92	-0.34	-0.74
SEP	39	30.97	0.35	0.06	29.96	31.54	-0.69	0.47
OCT	40	31.03	0.31	0.05	30.14	31.55	-0.70	0.69
NOV	39	31.33	0.28	0.05	30.60	31.83	-0.83	0.94
DEC	33	31.71	0.20	0.04	31.11	32.05	-0.81	1.69

MONTHLY STATISTICAL SUMMARY FOR 20 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	36	32.01	0.18	0.03	31.52	32.31	-0.60	0.68
FEB	36	32.24	0.19	0.03	31.59	32.59	-1.14	2.70
MAR	32	32.39	0.16	0.03	31.95	32.74	-0.28	1.32
APR	39	32.36	0.21	0.03	31.78	32.73	-0.43	0.52
MAY	41	32.23	0.26	0.04	31.63	32.80	-0.44	0.28
JUN	42	32.08	0.26	0.04	31.41	32.63	-0.72	0.73
JUL	41	31.94	0.27	0.04	31.43	32.57	-0.02	-0.42
AUG	41	31.64	0.39	0.06	30.89	32.52	0.08	-0.47
SEP	41	31.13	0.34	0.05	30.38	31.97	0.18	0.53
OCT	42	31.09	0.30	0.05	30.17	31.57	-0.77	1.06
NOV	38	31.37	0.28	0.05	30.60	31.78	-1.04	1.36
DEC	33	31.73	0.19	0.03	31.22	32.06	-0.47	0.73

MONTHLY STATISTICAL SUMMARY FOR 30 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	32.04	0.16	0.03	31.54	32.29	-0.76	0.98
FEB	41	32.24	0.19	0.03	31.61	32.60	-0.82	1.98
MAR	39	32.40	0.18	0.03	32.01	32.76	-0.28	-0.15
APR	46	32.41	0.21	0.03	31.94	32.82	-0.11	-0.63
MAY	50	32.33	0.22	0.03	31.81	32.83	-0.21	-0.04
JUN	54	32.28	0.21	0.03	31.71	32.73	-0.23	0.30
JUL	53	32.22	0.26	0.04	31.72	32.82	-0.24	-0.34
AUG	51	32.05	0.31	0.04	31.35	32.61	-0.49	-0.29
SEP	46	31.44	0.32	0.05	30.70	32.17	0.30	-0.01
OCT	49	31.24	0.30	0.04	30.34	31.76	-0.55	0.54
NOV	48	31.48	0.29	0.04	30.66	32.01	-0.90	1.41
DEC	43	31.80	0.18	0.03	31.27	32.15	-0.51	1.09

MONTHLY STATISTICAL SUMMARY FOR 50 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	32.12	0.16	0.02	31.76	32.38	-0.50	-0.49
FEB	41	32.34	0.16	0.03	31.88	32.71	-0.39	0.86
MAR	38	32.45	0.15	0.03	32.16	32.77	-0.02	-0.64
APR	48	32.51	0.19	0.03	32.12	32.89	0.05	-0.73
MAY	51	32.53	0.16	0.02	32.19	32.92	0.21	0.03
JUN	54	32.60	0.15	0.02	32.30	32.89	0.07	-0.84
JUL	53	32.61	0.17	0.02	32.22	33.02	0.00	-0.19
AUG	51	32.54	0.17	0.02	32.10	32.91	-0.45	0.21
SEP	49	32.14	0.28	0.04	31.40	32.82	0.02	0.22
OCT	49	31.74	0.38	0.06	30.57	32.34	-0.82	0.78
NOV	48	31.74	0.26	0.04	31.00	32.20	-0.77	0.59
DEC	43	31.91	0.20	0.03	31.44	32.25	-0.30	-0.32

MONTHLY STATISTICAL SUMMARY FOR 75 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	44	32.28	0.18	0.03	31.86	32.57	-0.48	-0.57
FEB	43	32.43	0.14	0.02	32.02	32.78	-0.15	1.22
MAR	39	32.55	0.13	0.02	32.33	32.84	0.12	-0.22
APR	47	32.61	0.17	0.02	32.26	32.96	0.07	-0.73
MAY	51	32.70	0.14	0.02	32.43	33.00	0.19	-0.31
JUN	53	32.77	0.14	0.02	32.50	33.10	-0.06	-0.60
JUL	51	32.81	0.15	0.02	32.50	33.14	0.12	-0.41
AUG	50	32.77	0.14	0.02	32.38	33.12	-0.10	0.32
SEP	50	32.60	0.17	0.02	32.21	32.94	-0.46	-0.23
OCT	48	32.41	0.22	0.03	31.72	32.82	-0.91	1.47
NOV	46	32.23	0.20	0.03	31.59	32.60	-0.74	1.33
DEC	42	32.14	0.19	0.03	31.78	32.55	-0.07	-0.48

MONTHLY STATISTICAL SUMMARY FOR 100 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	43	32.47	0.17	0.03	32.11	32.81	0.07	-0.82
FEB	43	32.57	0.14	0.02	32.21	32.92	0.06	0.74
MAR	38	32.65	0.11	0.02	32.44	32.88	0.12	-0.52
APR	48	32.75	0.14	0.02	32.47	33.10	0.17	-0.26
MAY	50	32.81	0.12	0.02	32.61	33.08	0.30	-0.38
JUN	53	32.89	0.15	0.02	32.58	33.43	0.59	2.30
JUL	52	32.92	0.14	0.02	32.65	33.23	0.23	-0.48
AUG	50	32.90	0.13	0.02	32.62	33.19	0.06	-0.43
SEP	50	32.80	0.14	0.02	32.48	33.09	-0.30	0.10
OCT	48	32.73	0.14	0.02	32.47	33.09	0.01	-0.21
NOV	47	32.61	0.14	0.02	32.36	32.91	0.12	-0.71
DEC	43	32.42	0.17	0.03	31.99	32.90	0.17	0.93

MONTHLY STATISTICAL SUMMARY FOR 125 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	31	32.66	0.17	0.03	32.34	33.01	0.21	-0.75
FEB	30	32.73	0.15	0.03	32.33	33.05	-0.72	1.24
MAR	26	32.79	0.12	0.02	32.52	32.99	-0.78	0.64
APR	35	32.84	0.14	0.02	32.58	33.10	-0.21	-0.35
MAY	35	32.91	0.12	0.02	32.69	33.15	-0.02	-0.68
JUN	36	32.97	0.12	0.02	32.73	33.21	-0.04	-0.59
JUL	35	32.98	0.12	0.02	32.74	33.22	-0.10	-0.60
AUG	34	32.97	0.12	0.02	32.73	33.22	-0.16	-0.04
SEP	37	32.94	0.13	0.02	32.62	33.15	-0.67	-0.01
OCT	35	32.92	0.14	0.02	32.54	33.20	-0.27	0.23
NOV	34	32.86	0.17	0.03	32.33	33.11	-1.09	1.39
DEC	29	32.66	0.15	0.03	32.36	33.03	0.42	0.50

MONTHLY STATISTICAL SUMMARY FOR 150 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	32.93	0.20	0.03	32.49	33.36	-0.01	-0.50
FEB	43	32.91	0.17	0.03	32.48	33.18	-0.66	0.20
MAR	38	32.91	0.14	0.02	32.56	33.15	-0.57	-0.08
APR	47	32.98	0.12	0.02	32.74	33.37	0.59	1.12
MAY	51	33.02	0.13	0.02	32.76	33.33	0.01	0.03
JUN	52	33.08	0.13	0.02	32.82	33.46	0.24	0.59
JUL	52	33.09	0.13	0.02	32.80	33.34	-0.10	-0.46
AUG	50	33.08	0.12	0.02	32.80	33.33	-0.16	-0.35
SEP	52	33.08	0.13	0.02	32.78	33.34	-0.10	-0.35
OCT	49	33.08	0.13	0.02	32.76	33.37	-0.21	0.06
NOV	47	33.06	0.13	0.02	32.74	33.35	-0.23	0.19
DEC	43	32.95	0.18	0.03	32.48	33.37	0.29	0.48

MONTHLY STATISTICAL SUMMARY FOR 175 METER SALINITY

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	39	33.16	0.19	0.03	32.72	33.66	-0.20	0.56
FEB	42	33.06	0.15	0.02	32.63	33.32	-0.58	0.40
MAR	37	33.06	0.15	0.03	32.65	33.40	-0.04	0.75
APR	44	33.09	0.13	0.02	32.77	33.39	0.18	0.32
MAY	49	33.14	0.12	0.02	32.83	33.42	-0.32	0.11
JUN	52	33.19	0.13	0.02	32.86	33.54	-0.11	0.23
JUL	52	33.21	0.12	0.02	32.91	33.41	-0.36	-0.32
AUG	49	33.21	0.12	0.02	33.00	33.51	0.20	-0.65
SEP	50	33.23	0.12	0.02	33.02	33.53	0.42	-0.27
OCT	48	33.27	0.13	0.02	32.99	33.59	0.50	0.26
NOV	46	33.28	0.14	0.02	33.01	33.59	0.30	-0.40
DEC	39	33.14	0.15	0.03	32.82	33.42	0.04	-0.69

Appendix B-3. Monthly average salinity anomalies by year at standard depths.

MONTHLY AVERAGE SURFACE SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.32	-0.13	-0.20	-0.04	0.04	0.17	0.10	0.04
1947			0.13		0.02	0.03	0.07		0.30	0.19			0.12
1948			0.33	0.17	-0.04	0.12	-0.05						0.11
1949						0.09		-0.20	0.32			0.37	0.15
1950			-0.05	-0.38		0.24	-0.09	-0.05	0.17		0.15	-0.02	0.00
1951	0.00	-0.15	-0.44	-0.75	-0.56	-0.44	-0.28	0.33	0.39	0.13			-0.18
1952	-0.09			-0.23	-0.07	-0.03	-0.26	-1.02	-0.49	-0.31		-0.03	-0.28
1953		-0.20		-0.89	-0.43		-0.31	0.27	0.39	0.39	0.12	0.27	-0.04
1954	0.17	-0.14	-0.31	-0.08	0.22	0.24	-0.05	0.27	0.47	0.36	0.35	0.27	0.15
1955	0.16	0.13		-0.30	-0.31	-0.21	-0.02	-0.06	0.21	0.28	0.02	0.12	0.00
1956	-0.11	-0.19	-0.11	-0.11	0.01	-0.09	0.12	0.45	0.45	0.30	0.23	0.08	0.09
1957	0.08	0.20	0.12	-0.09	-0.36	-0.53	-0.67	-0.16	-0.07	-0.26	-0.42	-0.01	-0.18
1958	-0.18	-0.34	-0.38	-0.37	-0.12	-0.06	-0.20	0.00	0.10	0.07	-0.04	0.11	-0.12
1959	0.13	0.31	0.32	0.31	0.17	0.08	-0.22	-0.18	0.02	0.00	-0.02	-0.07	0.07
1960	-0.10		-0.23	-0.15	-0.24	-0.18	0.06	-0.17	-0.15	0.14	0.07	0.07	-0.08
1961	0.00		0.02			-0.27	-0.03	0.12	0.24	0.15	0.06		0.04
1962	-0.01	0.10	-0.13		0.04	0.02	-0.30	0.08	0.30	0.07	-0.30		-0.01
1963	-0.16	0.04	0.16	0.17	0.15	0.18	0.17	0.40	0.24	0.08	-0.01	0.10	0.13
1964	-0.14	0.14	0.25	0.26	0.19	0.11	0.42	0.18	0.06	0.26	0.25	0.20	0.18
1965		0.23	-0.05	-0.09	0.08	-0.36	-0.10	0.41	0.68	0.50	0.46	0.43	0.20
1966		0.09	-0.02	-0.16	-0.09	0.09	0.18	0.42	0.38	0.51	0.30	-0.07	0.15
1967	-0.32	-0.14	0.00	-0.19	-0.34	-0.11	0.10	0.39	0.42	0.38	0.34	0.35	0.07
1968	0.27	0.04	-0.02	-0.07	0.07	0.10	0.02	0.13	0.00	-0.03	0.00	0.05	0.05
1969	0.12	-0.23	-0.19	-0.14	-0.06	-0.12	0.04	0.18	0.20	0.16	0.10	-0.05	0.00
1970	-0.14	-0.40	-0.55	-0.35	-0.37	-0.54	-0.32	-0.68		-0.44	-0.68	-0.46	-0.45
1971	-0.11	-0.43	-0.35	-0.19	-0.12	-0.10	-0.25	-0.42	-0.29	-0.05	-0.07	0.03	-0.20
1972	-0.04	0.12	0.15	0.21	0.20	0.17	0.09	-0.58	-0.36	-0.17	0.05		-0.01
1973	0.04	-0.04	-0.02	-0.57	-1.12	-0.72	-0.56	-0.32	0.00	-0.05	0.21	0.10	-0.25
1974	0.02	0.08	0.14	0.25	0.38	-0.18	-0.44	-1.00	-1.14	-0.86	-0.55		-0.30
1975	-0.10				0.06	0.27	-0.04	-0.21	-0.31	-0.08	0.04	0.12	-0.03
1976	0.04	-0.11	0.08	0.11	0.23	0.39	0.37		0.16	0.23	0.39	0.32	0.20
1977	0.27	0.33	0.20	0.09	0.24	-0.04	-0.24	-0.59	-0.49	-0.40	-0.20	0.07	-0.06
1978	-0.07	0.03		-0.14	0.12	0.33	0.12		-0.06	0.26	0.20		0.09
1979	0.17	0.04	0.04	0.15	-0.03	0.06	0.14	0.01	0.18	0.37	0.08	0.05	0.11
1980	0.11		0.01	-0.02	0.11	0.06	0.06	0.01	0.13				0.06
1981	0.03		0.07	-0.14	-0.02	0.08	0.02		-0.09		-0.10	0.07	-0.01
1982	0.13	0.27	0.30	0.24	0.30	0.31	0.36		0.08	0.09	-0.26		0.18
1983		-0.12		-0.79	-0.77	-0.36	-0.57		-0.15	-0.23	-0.27	-0.26	-0.39
1984	-0.29	-0.21		-0.67	-1.00	-0.76	-1.30	-0.90	-0.66	-0.60	-0.39	-0.24	-0.64
1985	-0.03	-0.06	0.08	0.11	0.12	0.26	0.39	-0.37	-0.51	-0.38	-0.17		-0.05
1986	-0.03	0.05	-0.04	-0.05	0.04	0.02	-0.03	0.17		0.19	0.10	0.26	0.06
1987	0.24	0.05		-0.89	-0.31	0.03	0.03	0.34	0.51	0.37	0.22	0.17	0.07
1988		0.17		0.09	0.07	0.07	0.21	0.45	0.18	0.00	0.18	-0.04	0.14
1989	-0.04	-0.08		0.25	0.53	0.58	0.27	0.33	0.10	0.41	0.31	0.33	0.27
1990	0.17	0.23	0.15	0.20	0.40	0.26	0.20	0.44	0.24	-0.05		0.32	0.23
1991		0.02	-0.08	-0.42	-0.57	-0.89	-1.19	-0.35	-0.31	-0.71	-0.87	-0.60	-0.54
1992	-0.80	-1.80		0.06	0.06	0.01	-0.35	-0.39	-0.18	-0.09	-0.08	-0.10	-0.33
1993	-0.08	-0.16	-0.49	-0.51	-0.19	-0.22	-0.35	-0.23	0.31	0.35	0.11	0.04	-0.12
1994	0.03	-0.02		0.01	-0.07	0.04	-0.10	-1.05	-0.64	-0.11	-0.09	-0.04	-0.19
1995		-0.26		-0.83	-1.21	-0.97	-0.75	-0.95	-0.47	-0.23	0.13	0.16	-0.54
1996	-0.03	-0.23	-0.17	-0.13	0.04	0.14	0.11	0.22	-0.25	-0.17	-0.12	-0.07	-0.06
1997	-0.11			-0.11	-0.37	-0.21	-0.32	-0.14	-0.13	-0.25	-0.14	0.01	-0.18
1998	-0.11		-0.17	-0.26	-0.46	-0.49	-0.57	-0.28	0.08	0.07	0.05	0.17	-0.18
1999	0.13		-0.08	-0.33	-0.19	-0.14	-0.63	-0.50	-0.23	-0.13	-0.08	0.07	-0.19

MONTHLY AVERAGE 10 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.38							0.38
1959	0.10	0.33	0.43	0.32	0.19	0.06	-0.20	-0.15	0.06	0.04	0.03	-0.07	0.10
1960	-0.11		-0.17	-0.14	-0.27	-0.22	0.02	-0.10	-0.16	0.17	0.07	0.09	-0.07
1961	0.01	0.07	0.03			-0.33	-0.01	0.08	0.25	0.17	0.06		0.04
1962	-0.01	0.12	-0.06		-0.01	-0.02	-0.35	0.06	0.27	0.12	-0.13		0.00
1963	-0.15	0.03	0.17	0.14	0.10	0.12	0.09	0.35	0.23	0.10	0.00	0.08	0.11
1964	-0.14	0.07	0.24	0.24	0.27	0.07	0.38	0.25	0.11	0.28	0.27	0.15	0.18
1965	0.06	0.12	-0.06	-0.06	-0.02	-0.37	-0.08	0.38		0.52	0.49	0.41	0.13
1966		0.20	-0.01	-0.18	-0.03	0.05	0.14	0.43	0.40	0.47	0.23	-0.08	0.15
1967	-0.41	-0.24	0.04	-0.14	-0.32	-0.08	0.07	0.32	0.40	0.31	0.30	0.36	0.05
1968	0.23	0.00	-0.05	-0.10	0.02	0.09	-0.01	0.06	-0.01	-0.03	-0.01	0.04	0.02
1969	0.18	-0.03	-0.15	-0.16	-0.08	-0.12	-0.01	0.04	0.09	0.18	0.11	-0.04	0.00
1970	-0.14	-0.41	-0.48	-0.37	-0.44	-0.57	-0.34	-0.72		-0.36	-0.67	-0.40	-0.45
1971	-0.09	-0.41	-0.30	-0.18	-0.15	-0.13	-0.28	-0.45	-0.38	-0.12	0.01	0.04	-0.20
1972	-0.03	0.10	0.20	0.26	0.16	0.18	0.06	-0.67	-0.38	-0.21	0.05		-0.03
1973	-0.01	0.00	0.06	-0.22	-1.07	-0.69	-0.63	-0.38	-0.11	0.04	0.22	0.13	-0.22
1974	0.01	0.05	0.15	0.28	0.31	-0.23	-0.50	-0.85	-1.09	-0.89	-0.61		-0.31
1975	-0.13	0.12			0.06	0.23	0.02	-0.22	-0.27	-0.04	0.10	0.14	0.00
1976	0.03	0.00	0.03	0.16	0.18	0.32	0.33	0.30	0.17	0.19	0.36	0.21	0.19
1977	0.15	0.23	0.04	0.06	0.22	-0.06	0.06	-0.41	-0.50	-0.37	-0.20	0.06	-0.06
1978	-0.02	0.02	-0.07	-0.11	-0.06	0.26	0.13	-0.02	-0.05	0.32	0.43		0.08
1979	0.15	0.11	0.09		0.01	0.08	0.21	-0.01	0.15	0.28	0.06	0.01	0.10
1980	0.07		-0.04	-0.05	0.04		0.04	0.11	0.13				0.04
1981	-0.14		-0.07	-0.16	-0.08	0.05	0.00		-0.11	-0.06	-0.14	-0.09	-0.08
1982	0.14	0.25	0.30	0.25	0.24	0.26	0.34		0.09	0.06	-0.26		0.17
1983		0.04		-0.64	-0.81	-0.39	-0.44	-0.29	-0.27	-0.30	-0.29	-0.25	-0.36
1984	-0.21	-0.21		-0.32	-0.62	-0.51	-0.82	-0.50	-0.63	-0.59	-0.38	-0.22	-0.46
1985	-0.05	-0.06	0.10	0.11	0.21	0.28	0.34	-0.40	-0.50	-0.36	-0.12		-0.04
1986	-0.02	0.10	0.06	-0.05	0.00	-0.01	-0.08	0.16	0.37	0.22	0.09	0.25	0.09
1987	0.24	0.05		-0.25	-0.27	0.00	0.00	0.30	0.51	0.39	0.21	0.16	0.12
1988		0.17		0.07	0.04	0.09	0.34	0.52	0.18	0.02	0.19	-0.02	0.16
1989	-0.05	-0.03		0.25	0.52	0.55	0.22	0.27	0.10	0.46	0.32	0.33	0.27
1990	0.18	0.27	0.20	0.19	0.37	0.26	0.17	0.46	0.26	-0.06		0.29	0.24
1991		0.02	-0.06	-0.41	-0.58	-0.80	-1.02	-0.32	-0.27	-0.58	-0.73	-0.57	-0.48
1992	-0.59	-0.83	0.06	0.01	0.01	0.08	-0.33	-0.46	-0.15	0.01	-0.15	-0.11	-0.20
1993	-0.08	-0.15	-0.11	-0.27	-0.36	-0.25	-0.29	-0.26	0.48	0.38	0.13	0.04	-0.06
1994	0.02	-0.05		-0.03	-0.02	0.05	-0.08	-0.77	-0.76	-0.11	-0.08	-0.03	-0.17
1995		-0.25		-0.73	-0.90	-0.87	-0.75	-1.01	-0.44	-0.14	0.16	0.09	-0.48
1996	-0.03	-0.23	-0.15	-0.15	0.00	0.09	0.06	0.19	-0.23	-0.14	-0.11	-0.07	-0.06
1997	-0.12			-0.13	-0.36	-0.21	-0.29	-0.17	-0.13	-0.17	-0.14	0.01	-0.17
1998	-0.12		-0.15	-0.20	-0.48	-0.45	-0.52	-0.21	0.15	0.11	0.05	0.16	-0.15
1999	0.11		-0.02	-0.23	-0.21	-0.14	-0.48	-0.55	-0.23	-0.11	-0.06	0.07	-0.17

MONTHLY AVERAGE 20 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										-0.23			-0.23
1954		-0.05		-0.20									-0.13
1955					-0.27			-0.24					-0.26
1956								0.65		0.32			0.49
1957		0.17		0.04		-0.66							-0.15
1958									0.01				0.01
1959	0.23	0.33	0.36	0.32	0.12	-0.07	-0.19	-0.24	-0.09	0.00	0.04	-0.07	0.06
1960	-0.09		-0.16	-0.18	-0.31	-0.30	0.05	-0.19	-0.26	0.19		0.07	-0.12
1961	0.03	0.06	0.02			-0.11	-0.04	0.06	0.17	0.21	0.02		0.05
1962	-0.02	0.10	0.01		-0.07	-0.08	-0.23	0.32	0.25	0.17	-0.09		0.04
1963	-0.03	0.05	0.15	0.12	0.06	0.07	-0.14	0.15	0.18	0.08	-0.03	0.05	0.06
1964	-0.15	0.06	0.21	0.24	0.10	0.20	0.31	0.16	0.06	0.29	0.35	0.17	0.17
1965	0.05	0.08	-0.06	-0.09	-0.05	-0.31	-0.07	0.42	0.76	0.50	0.39	0.37	0.17
1966		0.16	0.04	-0.18	0.01	-0.03	0.20	0.37	0.29	0.47	0.17	-0.12	0.13
1967	-0.40	-0.23	-0.06	-0.05	-0.10	-0.13	-0.01	0.37	0.34	0.31	0.31	0.33	0.06
1968	0.22	-0.03	-0.06	-0.11	-0.05	0.02	-0.21	-0.11	-0.13	-0.02	0.02	0.01	-0.04
1969	0.18	-0.07	-0.15	-0.19	-0.17	-0.10	-0.04	-0.23	-0.06	0.16	0.14	-0.06	-0.05
1970	-0.17	-0.31	-0.43	-0.38	-0.44	-0.64	-0.54	-0.75		-0.36	-0.71	-0.37	-0.46
1971	-0.05	-0.39	-0.27	-0.20	-0.23	-0.18	-0.37	-0.57	-0.50	-0.16	-0.04	0.03	-0.24
1972	-0.03	0.07	0.17	0.21	0.13	0.09	-0.05	-0.83	-0.46	-0.23	0.03		-0.08
1973	0.10	0.00	0.06	-0.05	-0.59	-0.10	-0.24	-0.31	-0.25	0.03	0.19	0.09	-0.09
1974	-0.01	0.03	0.13	0.24	0.24	-0.34	-0.47	-0.28	-0.79	-0.89	-0.58		-0.25
1975	-0.09	0.04			0.07	0.22	0.12	0.18	0.19	0.05	0.09	0.09	0.10
1976	0.01		0.03	0.09	0.11	0.21	0.13	0.03	0.05	0.18	0.32	0.21	0.12
1977	0.23	0.19	0.02	0.06	0.21	-0.04	0.12	-0.27	-0.21	-0.39	-0.14	0.06	-0.01
1978	0.03	-0.03	-0.09	-0.07	-0.08	0.14	-0.07	-0.34	-0.21	0.28	0.38		-0.01
1979	0.21	0.08	0.07		-0.03	0.23	0.27	-0.06	-0.01	0.26	0.00	-0.04	0.09
1980			-0.03	-0.04	-0.03	-0.08	0.13	0.13	-0.06				0.00
1981	-0.08		-0.08	-0.15	-0.04	0.09	-0.22		-0.16	0.02	-0.16	-0.12	-0.09
1982	0.20	0.21	0.27	0.25	0.21	0.16	0.28		-0.03	0.02	-0.19		0.14
1983		0.01		-0.51	-0.69	-0.37	-0.33	-0.40	-0.32	-0.30	-0.35	-0.26	-0.35
1984	-0.24	-0.23		-0.22	-0.29	-0.03	-0.62	-0.40	-0.55	-0.56	-0.40	-0.22	-0.34
1985	-0.04	-0.09	0.08	0.12	0.19	0.22	0.26	-0.07	-0.49	-0.38	-0.04		-0.02
1986	-0.03	0.08	0.07	-0.04	-0.05	-0.07	-0.26	0.07	0.09	0.19	0.03	0.21	0.02
1987	0.20	0.01		-0.12	-0.23	0.04	-0.05	0.09	0.45	0.38	0.19	0.10	0.10
1988		0.14		0.07	0.04	0.09	0.52	0.62	0.10	0.13	0.23	-0.06	0.19
1989	-0.08	-0.04		0.24	0.47	0.48	0.07	0.13	-0.01	0.51	0.31	0.33	0.22
1990	0.19	0.26	0.19	0.18	0.31	0.24	0.16	0.36	0.51	0.04		0.27	0.25
1991		-0.02	-0.10	-0.29	-0.44	-0.58	-0.27	-0.15	-0.16	-0.34	-0.79	-0.50	-0.33
1992	-0.49	-0.68	0.02	0.08	-0.05	-0.01	-0.52	-0.56	-0.16	0.08	-0.11	-0.14	-0.21
1993	-0.09	-0.10	-0.01	-0.17	-0.28	-0.28	-0.51	-0.53	0.69	0.35	0.10	0.00	-0.07
1994	0.01	-0.10		0.04	-0.07	-0.02	-0.15	-0.54	-0.80	-0.10	-0.04	0.04	-0.16
1995		-0.12		-0.64	-0.70	-0.74	-0.57	-0.77	-0.29	-0.03	0.17	0.07	-0.36
1996	-0.01	-0.26	-0.15	-0.14	-0.03	0.00	-0.03	0.40	-0.20	-0.11	-0.12	-0.09	-0.06
1997	-0.08			-0.15	-0.32	-0.13	-0.05	-0.14	-0.21	-0.07	-0.14	-0.01	-0.13
1998	-0.12		-0.17	-0.18	-0.35	-0.18	-0.35	0.36	0.10	0.10	0.04	0.16	-0.05
1999	0.16		-0.01	-0.19	-0.21	-0.10	-0.23	-0.36	-0.12	-0.13	-0.05	0.03	-0.11

MONTHLY AVERAGE 30 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.06	-0.32	-0.78	-0.33	-0.07	0.12	0.17	-0.16
1947			0.20		-0.07	-0.21	-0.43			0.14	0.45		0.01
1948				0.13	0.13	-0.02	-0.14	0.02					0.02
1949						-0.12		-0.24	0.10			0.28	0.01
1950			0.28	0.34		-0.06	-0.15	-0.05	0.05		0.10	-0.03	0.06
1951	0.01	-0.17	-0.39	-0.53	-0.51	-0.29	-0.15	0.09	-0.01	0.01			-0.19
1952	0.11			-0.07	-0.13	0.09	-0.15	-0.08		-0.28		-0.04	-0.07
1953		-0.22		-0.40	-0.38	-0.30	-0.43	-0.16	-0.06	0.29	0.12	0.16	-0.14
1954	0.20	-0.08	-0.31		0.06	-0.01	-0.13	0.13		0.42	0.30	0.37	0.10
1955	0.16	0.21		-0.36		-0.28	-0.40	-0.50	-0.27	0.22	0.09	0.09	-0.10
1956	-0.11	-0.14	-0.14	-0.21	-0.16	-0.21	-0.05	0.34	0.31	0.17	0.12	-0.01	-0.01
1957	-0.02		0.20		-0.49	-0.66	-0.59	0.09	-0.19	-0.31	-0.21	0.01	-0.22
1958		-0.16	-0.29	-0.37	-0.26	-0.26	-0.61	-0.79		-0.05	-0.08	0.13	-0.27
1959	0.24	0.32	0.35	0.27	0.02	-0.22	-0.20	-0.23		-0.08	0.01	-0.08	0.04
1960	-0.12	-0.27	-0.20	-0.23	-0.33	-0.15	0.00	0.03	-0.44	0.14	0.00	0.04	-0.13
1961	0.02	0.03	0.01		-0.61	0.09	0.00	-0.05	-0.02	0.11	-0.03		-0.05
1962	-0.05	0.08	-0.01		-0.16	-0.12	-0.05	0.22	0.03	0.12	-0.10		0.00
1963	-0.02	0.06	0.12	0.07	0.03	-0.01	0.00	0.29	0.05	-0.04	-0.07	0.02	0.04
1964	-0.14	0.08	0.19	0.20	0.16	0.28	0.18	-0.06	-0.13	0.44	0.37	0.17	0.15
1965	0.06	0.06	-0.09	-0.14	-0.14	-0.43	0.03	0.28	0.65	0.41	0.44	0.32	0.12
1966		0.14	0.02	-0.19	-0.05	-0.10	0.07	0.14	0.10	0.56	0.23	-0.11	0.07
1967	-0.36	-0.21	-0.01	-0.08	-0.12	-0.11	0.00	0.25	0.33	0.26	0.33	0.29	0.05
1968	0.17	-0.04	-0.08	-0.16	-0.11	0.01	-0.40	-0.26	-0.23	-0.09	0.00	0.01	-0.10
1969	0.15	-0.09	-0.16	-0.23	-0.21	-0.16	-0.16	0.01	0.06	0.19	0.26	-0.01	-0.03
1970	-0.12	-0.34	-0.41	-0.42	-0.41	-0.55	-0.63	-0.65		-0.31	-0.72	-0.38	-0.45
1971	-0.06	-0.30	-0.21	-0.24	-0.26	-0.15	-0.30	-0.63	-0.46	-0.21	-0.03	-0.03	-0.24
1972	-0.06	0.05	0.14	0.16	0.03	0.08	0.01	-0.54	-0.30	-0.12	-0.02		-0.05
1973	0.09	-0.02	0.05	0.04	-0.20	-0.02	-0.13	-0.29	-0.49	-0.10	0.24	0.05	-0.07
1974	-0.03	0.07	0.16	0.20	0.22	-0.37	-0.55	-0.06	-0.47	-0.85	-0.62		-0.21
1975	-0.11	0.04			0.01	0.12	-0.05	-0.13		0.32	0.09	0.12	0.05
1976	0.02	-0.06	0.00	0.05	0.08	0.05	-0.13	-0.16	-0.04	0.07	0.26	0.16	0.03
1977	0.20	0.22	0.06	0.07	0.17	-0.12	0.01	-0.44	-0.12	-0.47	-0.11	0.03	-0.04
1978	0.04	0.04	-0.09	-0.04	-0.11	0.36	0.17	-0.03	-0.43		0.33		0.02
1979	0.25		0.06	0.12	-0.12	0.15	0.24	0.04	-0.23	0.15	-0.03	-0.02	0.06
1980	0.00		-0.05	-0.01	-0.08	0.04	0.15	-0.03	-0.29				-0.03
1981	-0.03		-0.07	-0.16	-0.01	0.07	0.17		0.07	-0.06	-0.09	-0.16	-0.03
1982	0.20	0.20	0.27	0.23	0.21	0.05	0.29		0.30	0.02	-0.20		0.16
1983		-0.01		-0.04	-0.11	0.31	-0.05	-0.16	-0.17	-0.39	-0.37	-0.28	-0.13
1984	-0.25	-0.24		-0.25	-0.20	-0.05	-0.38	-0.35	-0.09	-0.43	-0.44	-0.12	-0.25
1985	-0.03	-0.06	0.07	0.07	0.17	0.22	0.20	0.21	-0.51	-0.50	-0.05		-0.02
1986	-0.04	0.06	0.06	-0.04	-0.07	0.02	-0.24	0.03	-0.05	0.09	0.05	0.20	0.01
1987	0.18	0.03		0.04	0.10	-0.08	-0.18	-0.02	0.53	0.45	0.19	0.05	0.12
1988		0.12		0.04	-0.01	0.18	0.45	0.49	0.05	0.34	0.56	-0.11	0.21
1989		-0.05		0.22	0.38	0.37	0.09	0.08	0.37	0.52	0.27	0.34	0.26
1990	0.20	0.28	0.23	0.15	0.22	0.15	0.06	0.46	0.66	0.11		0.25	0.25
1991		-0.04	-0.12	-0.25	-0.35	-0.41	-0.18	0.00	-0.38	0.15	-0.79	-0.50	-0.26
1992	-0.50	-0.68	0.03	0.08	-0.13	-0.11	-0.62	-0.55	-0.20	0.05	-0.03	-0.18	-0.24
1993	-0.04	0.00	0.02	-0.16	-0.32	-0.30	-0.64	-0.30	0.36	0.56	0.06	-0.04	-0.07
1994	-0.02	-0.12		0.01	-0.06	0.11	0.00	0.02	-0.80	-0.21	0.07	0.08	-0.08
1995		-0.08		-0.37	-0.57	-0.25	-0.42	-0.41	-0.23	0.33	0.22	0.07	-0.17
1996	-0.02	-0.27	-0.14	-0.16	-0.10	-0.09	-0.30	-0.05	-0.37	-0.10	0.04	-0.10	-0.14
1997	-0.06			-0.17	-0.34	-0.14	-0.12	0.28	0.28	-0.11	-0.18	-0.03	-0.06
1998	-0.15		-0.19	-0.17	-0.31	-0.24	-0.28	0.31	0.24	0.16	0.11	0.17	-0.03
1999	0.21		-0.01	-0.22	-0.14	-0.07	-0.06	0.00	-0.05	-0.02	-0.05	0.00	-0.04

MONTHLY AVERAGE 50 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.03	-0.19	-0.49	-0.09	-0.17	0.18	0.22	-0.07
1947			0.17		-0.09	-0.11	-0.33		-0.31	-0.29	0.33		-0.09
1948				0.21	0.03	0.14	-0.06	-0.01					0.06
1949						-0.19		0.15	0.09			0.26	0.08
1950				0.33		0.03	0.24	0.17	0.41		0.27	0.16	0.23
1951	0.14		-0.29	-0.36	-0.42	-0.05	-0.16	-0.13		0.61			-0.08
1952	0.21			-0.02	0.09	0.24	0.17	-0.03		0.08		-0.07	0.08
1953		-0.22		-0.09	0.12	0.11	-0.07	-0.24	-0.27	-0.07	-0.01	0.16	-0.06
1954	0.11	-0.07	-0.23	-0.18	-0.05	0.04	0.09	0.30	0.67	0.44	0.14	0.35	0.13
1955	0.17	0.19		-0.36	-0.16	0.08	0.16	-0.06	-0.11	0.12	0.24	0.17	0.04
1956	0.11	-0.08	-0.20	-0.15	-0.08	0.05	0.02	0.12	0.20	0.15	0.04	-0.07	0.01
1957	-0.03	0.08	0.01	-0.10	-0.13	-0.26	-0.26	0.12	0.02	0.08	0.06	-0.04	-0.04
1958		-0.05	-0.31	-0.32	-0.15	-0.17	-0.24	-0.28	-0.24	-0.07	-0.07	0.12	-0.16
1959		0.31	0.29	0.25	0.05	-0.20	-0.22	-0.24		-0.05	0.03	-0.19	0.00
1960	-0.17		-0.21	-0.18	-0.19	-0.21	-0.19	-0.17	-0.06	0.26	-0.08	0.09	-0.10
1961	-0.04	-0.03	-0.04		-0.27	0.04	-0.04	-0.14	-0.20	0.16	0.02		-0.05
1962	-0.12	0.05	-0.04		-0.19	-0.07	-0.08	0.09	0.06	0.28	0.14		0.01
1963	-0.01	0.02	0.07	0.05	0.01	0.11	0.10	0.08	0.17	-0.03	0.27	0.02	0.07
1964	-0.24	0.00	0.12	0.18	0.07	0.21	0.23	0.17	0.18	0.42	0.28	0.31	0.16
1965	0.06	-0.01	-0.17	-0.06	-0.16	-0.23	-0.03	0.15	0.20	0.22	0.38	0.24	0.05
1966		0.21	0.01	-0.22	-0.08	-0.27	-0.12	0.00	0.13	0.33	0.07	-0.25	-0.02
1967	-0.33	-0.08	-0.08	-0.11	-0.04	0.00	0.06	0.09	0.13	0.17	0.52	0.29	0.05
1968	0.10	-0.09	-0.10	-0.17	-0.23	-0.19	-0.32	-0.29	-0.28	-0.57	-0.23	-0.01	-0.20
1969	0.10	-0.16	-0.21	-0.27	-0.25	-0.21	-0.21	-0.04	0.00	-0.14	0.21	0.36	-0.07
1970	0.10	-0.15	-0.33	-0.44	-0.34	-0.27	-0.17	-0.07		-0.76	-0.66	-0.45	-0.32
1971	-0.02	-0.32	-0.18	-0.28	-0.22	-0.18	-0.39	-0.46	-0.27	-0.33	-0.10	-0.11	-0.24
1972	-0.14	-0.01	0.14	0.10	-0.03	0.00	0.04	0.03	0.12	0.51	0.20		0.09
1973	0.17	0.01	-0.02	0.03	-0.07	0.01	-0.07	-0.11	-0.50	0.00	0.42	-0.05	-0.02
1974	-0.11	0.03	0.09	0.13	0.12	-0.06	-0.09	0.08	0.08	-1.11	-0.52		-0.12
1975	-0.01	0.08			-0.08	-0.12	-0.11	0.05	0.58	0.24	0.18	0.17	0.10
1976	0.10	-0.07	-0.05	0.08	0.01	-0.09	-0.15	-0.14	-0.02	-0.14	0.13	0.07	-0.02
1977	0.16	0.15	0.03	0.04	0.20	0.11	0.00	-0.16	-0.35	-0.01	-0.06	0.01	0.01
1978	0.01	0.05	0.17	0.03	0.00	0.24	0.02	-0.09	-0.77		0.28		-0.01
1979	0.12	0.17	0.04	0.07	-0.18	0.08	0.13	0.03	-0.34	0.25	-0.01	-0.08	0.02
1980	-0.04		-0.07	-0.05	-0.13	0.02	0.04	-0.10	-0.46				-0.10
1981	-0.10		-0.07	-0.07	0.00	-0.04	-0.04		0.08	-0.20	-0.12	-0.16	-0.07
1982	0.24	0.15	0.23	0.26	0.17	0.17	0.22		0.22	0.17	-0.39		0.14
1983		-0.07		0.11	-0.06	0.21	0.08	0.06	0.16	-0.50	-0.38	-0.28	-0.07
1984	-0.23	-0.18		-0.29	-0.17	0.00	0.06	-0.38	-0.14	-0.60	-0.42	0.07	-0.21
1985	0.01	-0.02	0.05	0.04	0.07	0.09	0.12	0.13	0.25	-0.56	-0.05		0.01
1986	-0.04	0.10	0.04	-0.05	-0.10	-0.05	-0.13	-0.14	-0.12	-0.24	-0.02	0.12	-0.05
1987	0.09	0.03		0.22	0.25	0.06	-0.09	-0.17	0.13	0.54	0.37	-0.07	0.12
1988		0.17		0.07	0.01	0.20	0.35	0.32	0.40	0.65	0.51	-0.19	0.25
1989	-0.10	-0.05		0.23	0.31	0.25	0.11	0.09	0.08	0.45	0.27	0.29	0.18
1990	0.13	0.22	0.18	0.18	0.10	0.07	0.05	0.15	0.40	0.13		0.22	0.17
1991		-0.10	-0.19	-0.21	-0.23	-0.33	-0.14	-0.10	-0.26	0.67	-0.19	-0.40	-0.13
1992	-0.30	-0.49	0.02	0.10	-0.16	-0.08	-0.30	-0.14	0.08	0.16	0.00	-0.22	-0.11
1993	0.02	0.05	0.05	-0.09	-0.37	-0.15	-0.45	-0.03	0.37	0.40	0.15	-0.16	-0.02
1994	-0.10	-0.20		-0.07	-0.14	0.00	-0.01	0.04	-0.28	-0.29	0.11	0.07	-0.08
1995		-0.08		-0.22	-0.40	-0.15	-0.14	-0.13	-0.05	0.44	0.36	0.02	-0.04
1996	-0.07	-0.29	-0.12	-0.19	-0.15	-0.21	-0.31	-0.16	-0.34	0.01	0.10	-0.12	-0.15
1997	-0.10			-0.16	-0.19	-0.10	-0.08	0.08	0.24	0.60	0.27	-0.01	0.06
1998	-0.21		-0.24	-0.11	-0.23	-0.18	-0.05	0.09	0.23	0.30	0.30	0.17	0.01
1999	0.12		0.00	-0.19	-0.14	-0.07	-0.15	-0.16	-0.07	0.14	0.00	0.03	-0.04

MONTHLY AVERAGE 75 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			0.03		-0.05	-0.15	-0.34						-0.13
1948				0.12	0.07	0.10	-0.08	-0.11					0.02
1949						0.06		0.10	0.03			0.25	0.11
1950			0.27	0.29		0.12	0.30	0.33	0.07		0.15	0.18	0.21
1951	0.11	-0.21	-0.24	-0.26	-0.25	-0.06	-0.04	-0.09	-0.02	-0.02			-0.11
1952	0.26			0.06	0.20	0.30	0.23	0.11	-0.05	0.00		0.15	0.14
1953		-0.04		0.01	0.12	0.07	-0.07	-0.25	-0.44	-0.24	-0.33	0.15	-0.10
1954	0.14	-0.17	-0.20	-0.26	-0.11	-0.04	0.13	0.21	0.29	0.12	-0.10	0.26	0.02
1955	0.10	0.13		-0.29	-0.14	0.03	0.19	0.14	0.01	-0.11	0.05	0.14	0.02
1956	0.20	-0.04	-0.12	-0.17	-0.10	0.06	0.04	0.02	0.04	-0.01	0.00	0.32	0.02
1957	0.09	0.03	-0.03	-0.11	0.01	-0.03	-0.17	0.10	0.02	0.15	0.05	0.09	0.02
1958	-0.11	-0.07	-0.21	-0.19	-0.11	-0.08	-0.18	-0.18	-0.32	-0.20	-0.26	-0.04	-0.16
1959	0.28	0.25	0.23	0.18	0.02	-0.09	-0.07	-0.11	-0.29	-0.07	0.03	-0.19	0.01
1960	-0.16	-0.23	-0.23	-0.24	-0.22	-0.23	-0.21	-0.19	-0.04	-0.08	-0.09	0.20	-0.14
1961	0.07	-0.10	-0.07		-0.10	-0.01	-0.01	-0.17	-0.34	-0.19	-0.02		-0.09
1962	0.15	0.05	-0.04		-0.14	0.04	-0.01	0.09	0.08	0.12	0.29		0.06
1963	0.05	-0.04	0.03	-0.01	0.00	0.03	0.02	0.05	-0.04	-0.12	0.15	0.16	0.02
1964	-0.29	0.08	0.08	0.14	0.04	0.15	0.19	0.23	0.25	0.16	-0.07	0.44	0.12
1965	0.21	-0.07	-0.13	0.03	-0.07	-0.21	0.00	0.07	0.06	0.08	0.26	0.19	0.04
1966		0.14	0.04	-0.21	-0.06	-0.29	-0.08	-0.02	0.03	0.13	0.08	0.01	-0.02
1967	-0.24	-0.08	-0.06	-0.14	0.03	-0.02	-0.01	0.04	-0.11	-0.08	0.22	0.20	-0.02
1968	0.00	-0.04	-0.01	-0.16	-0.23	-0.29	-0.32	-0.20	-0.17	0.00	-0.14	-0.04	-0.13
1969	0.08	-0.13	-0.15	-0.27	-0.23	-0.22	-0.16	-0.11	-0.01	-0.28	0.15	0.40	-0.08
1970	0.05	-0.10	-0.19	-0.40	-0.32	-0.28	-0.13	-0.12		-0.48	-0.25	-0.32	-0.23
1971	0.00	-0.09	-0.01	-0.11	-0.18	-0.22	-0.24	-0.42	-0.37	-0.72	-0.03	-0.12	-0.21
1972	-0.25	-0.09	0.15	0.05	-0.08	-0.01	0.12	0.05	0.12	-0.03	-0.03		0.00
1973	0.17	0.00	0.01	0.06	0.07	-0.01	-0.01	0.01	-0.20	0.10	0.40	-0.03	0.05
1974	-0.21	0.00	0.08	0.17	0.14	0.14	0.04	0.13	0.14	0.22	0.19		0.09
1975	-0.08	0.01			-0.17	-0.21	-0.12	-0.03	0.11	-0.22	-0.01	0.12	-0.06
1976	0.11	-0.12	-0.06	0.02	-0.02	-0.08	-0.18	-0.18	-0.24	-0.18	-0.24	-0.09	-0.11
1977	0.06	0.13	0.00	0.00	0.16	0.10	0.15	-0.02	0.08	0.02	0.01	-0.12	0.05
1978	0.02	0.02	0.08	-0.06	0.05	0.13		0.05	-0.12	0.37	0.33		0.09
1979	0.30	0.32	0.14		0.02	0.07	0.07	0.06	0.13	0.27	0.01	-0.19	0.11
1980	-0.23		-0.02	-0.03	-0.02	-0.06	0.00	-0.03	-0.14				-0.07
1981	0.16		-0.03	-0.11	0.02	-0.03	-0.11		-0.10	-0.24	-0.15	0.06	-0.05
1982	0.27	0.08	0.21	0.22	0.19	0.16	0.14		0.04	-0.11	-0.63		0.06
1983		-0.13		0.12	0.01	0.15	0.09	0.04	-0.02	0.03	-0.02	-0.29	0.00
1984	-0.26	-0.09		-0.36	-0.10	0.04	0.08	-0.13	-0.05	-0.09	-0.30	0.08	-0.11
1985	-0.01	-0.04	0.04	-0.04	0.03	0.04	0.05	0.08	0.16	0.02	0.00		0.03
1986	-0.03	0.02	0.00	-0.13	-0.12	-0.15	-0.21	-0.18	-0.18	-0.31	0.18	0.01	-0.09
1987	0.01	0.07		0.20	0.23	0.11	-0.01	-0.13	-0.01	0.03	0.13	-0.18	0.04
1988		0.17		0.07	0.05	0.19	0.24	0.24	0.19	0.24	0.14	-0.15	0.14
1989	-0.06	-0.08		0.18	0.26	0.21	0.16	0.13	-0.01	0.19	0.13	0.21	0.12
1990	0.03	0.14	0.16	0.13	0.04	0.06	0.08	0.06	0.07	0.01		0.17	0.09
1991		-0.19	-0.22	-0.11	0.01	-0.17	-0.05	-0.09	-0.16	0.19	0.16	-0.29	-0.08
1992	-0.35	-0.45	0.00	0.03	-0.17	-0.12	-0.12	-0.09	-0.05	-0.15	0.05	-0.05	-0.12
1993	0.14	0.06	0.02	-0.10	-0.08	0.02	-0.15	0.03	0.13	0.09	0.10	-0.23	0.00
1994	-0.14	-0.26		-0.08	-0.10	-0.06	-0.05	0.00	-0.26	-0.59	0.07	0.10	-0.12
1995		0.00		-0.13	-0.31	-0.18	-0.13	-0.03	-0.21	0.05	0.24	0.08	-0.06
1996	-0.11	-0.10	-0.08	-0.25	-0.20	-0.23	-0.26	-0.23	-0.42	-0.11	-0.03	-0.14	-0.18
1997	-0.07			-0.21	-0.14	-0.06	-0.04	0.02	0.05	0.27	0.34	0.06	0.02
1998	-0.11		-0.06	-0.08	-0.21	-0.11	-0.12	-0.06	-0.02	0.17	0.30	0.23	-0.01
1999	0.23		0.05	-0.10	-0.10	-0.10	-0.17	-0.18	-0.21	-0.18	-0.01	0.02	-0.07

MONTHLY AVERAGE 100 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.01	-0.18	-0.15	-0.10	-0.09	-0.24	-0.30	-0.15
1947			-0.07		-0.07	-0.16	-0.29		-0.34	-0.19	0.00		-0.16
1948				0.05	0.06	0.09	-0.02	-0.03					0.03
1949						0.05		0.12	0.16			0.28	0.15
1950				0.33		0.18	0.27	0.27	0.10		0.00	0.20	0.19
1951	0.15	-0.16	-0.22	-0.17	-0.10	-0.04	0.02		-0.01	-0.10			-0.07
1952	0.23			0.10	0.23	0.53	0.28	0.16		-0.15		0.15	0.19
1953		-0.02		0.12	0.17		0.03	-0.08		-0.01	-0.05	0.09	0.03
1954	0.28	-0.02	-0.11	-0.14	-0.15	0.05	0.20	0.18	0.25	0.11	-0.03	0.16	0.07
1955	-0.05	0.04		-0.10	-0.10	0.02	0.13	0.16	0.15		0.04	0.05	0.03
1956	0.05	0.02	-0.15	-0.12		0.06	0.01	0.00	0.02	-0.11	-0.16	0.04	-0.03
1957	-0.01	0.00	-0.06	-0.06	0.06	0.02	-0.10	0.11	-0.04	-0.04	0.03	0.07	0.00
1958	-0.20	-0.09	-0.13	-0.11	-0.05	-0.09	-0.14	-0.17	-0.21	-0.31	-0.19	0.01	-0.14
1959	0.23	0.21	0.19	0.10	0.02	-0.05	-0.13	-0.08	-0.09	0.03	0.03	-0.22	0.02
1960	-0.17	-0.25	-0.22	-0.22	-0.24	-0.32	-0.25	-0.22	-0.07	-0.14	-0.06	0.04	-0.18
1961	0.01	-0.15	-0.18		-0.08	-0.01	-0.02	-0.15	-0.21	-0.25	-0.10		-0.11
1962	0.19	0.02	-0.15		0.00	0.06	0.00	0.05	-0.10	0.07	0.16		0.03
1963	0.13	-0.13	-0.07	-0.06	-0.01	0.03	0.01	-0.02	-0.02	-0.08	0.01	0.15	-0.01
1964		0.24	0.13	0.12	0.02	0.11	0.14	0.22	0.23	0.19	-0.19	0.27	0.13
1965	0.29	-0.11	-0.17	-0.02	-0.10	-0.03	0.02	0.01	0.04	0.01	0.16	0.50	0.05
1966		0.03	0.06	-0.02	-0.05	-0.14	-0.06	-0.04	-0.05	-0.05	0.13	0.06	-0.01
1967	-0.21	-0.15	-0.02	-0.10	0.01	-0.03	-0.09	-0.08	-0.13	-0.12	0.05	0.08	-0.07
1968	-0.10	-0.07	0.01	-0.14	-0.13	-0.13	-0.17	-0.16	-0.05	-0.04	0.11	0.06	-0.07
1969	0.10	-0.15	-0.02	-0.28	-0.22	-0.23	-0.18	-0.14	-0.12	-0.18	0.04	0.32	-0.09
1970	-0.04	0.02	-0.10	-0.21	-0.25	-0.23	-0.16	-0.18		-0.27	-0.17	-0.42	-0.18
1971	-0.15	0.03	0.05	-0.04	-0.17	-0.22	-0.23	-0.29	-0.35		-0.04	-0.18	-0.14
1972	-0.20	-0.04	0.07	-0.05	-0.07	-0.06	0.04	0.07	0.02	-0.24	-0.27		-0.07
1973	0.04	0.08	0.05	0.04	-0.01	-0.04	0.04	0.07	-0.07	0.07	0.30	0.11	0.06
1974	-0.26	-0.01	0.06	0.14	0.13	0.11	0.15	0.11	0.18	0.04	0.24		0.08
1975	-0.07	0.01			-0.24	-0.26	-0.13	0.00	0.11	-0.30	-0.14	-0.14	-0.12
1976	0.03	-0.09	-0.05	-0.03	-0.11	-0.05	-0.15	-0.10	-0.11	0.05	0.02	-0.02	-0.05
1977	0.22	0.16	-0.05	-0.01	0.12	0.03	0.11	-0.03	-0.02	-0.02	0.14	-0.07	0.05
1978	-0.01	0.06	-0.05	0.02	0.01	0.13		0.01	-0.04	0.32	0.17		0.06
1979	0.36	0.32	0.20	0.10	-0.08	0.11	0.05	0.05	0.13	0.15	0.25	-0.07	0.13
1980	-0.05		0.14	0.10	0.02	0.03	-0.02	-0.02	0.02				0.03
1981	0.21		-0.08	-0.10	0.01	-0.03	-0.14		-0.11	-0.25	-0.20	0.18	-0.05
1982	0.28	0.02	0.15	0.14	0.12	0.11	0.08		-0.03	0.03			0.10
1983		-0.16		0.11	-0.05	0.14	0.05	0.02	0.09	0.01	0.13	-0.28	0.01
1984	-0.23	-0.11		-0.27	0.02	0.07	0.06	-0.04	0.09	0.06	-0.15	-0.07	-0.05
1985	-0.08	-0.11	-0.03	-0.03	0.01	-0.01	0.01	0.05	0.09	0.05	0.10		0.00
1986	0.06	-0.01	-0.02	-0.16	-0.18	-0.22	-0.24	-0.25	-0.11	-0.14	0.01	-0.10	-0.11
1987	-0.14	0.05		0.14	0.19	0.13	0.04	-0.03	-0.01	-0.07	-0.03	0.03	0.03
1988		0.20		0.07	0.06	0.22	0.21	0.20	0.14	0.09	-0.16	-0.05	0.10
1989	0.06	-0.14		0.23	0.21	0.18	0.15	0.19	0.06	0.06	0.00	-0.08	0.08
1990	-0.04	0.06	0.10	0.10	0.00	0.05	0.05	0.04	0.04	0.00		-0.02	0.03
1991		-0.31	-0.24	-0.13	0.02	-0.07	-0.07	-0.11	-0.27	-0.05	0.02	-0.10	-0.12
1992	-0.35	-0.40	-0.03	0.04	-0.20	-0.15	-0.17	-0.15	-0.12	-0.07	0.07	-0.05	-0.13
1993	0.09	0.08	0.00	-0.07	-0.04	0.05	-0.09	-0.02	0.06	0.05	0.09	-0.18	0.00
1994	-0.13	-0.17		-0.02	-0.11	-0.10	-0.11	0.04	-0.11	-0.20	-0.13	0.05	-0.09
1995		0.01		-0.09	-0.19	-0.12	-0.11	-0.03	-0.12	-0.03	0.14	0.01	-0.05
1996	-0.11	-0.07	-0.02	-0.30	-0.22	-0.24	-0.29	-0.24	-0.35	-0.23	-0.10	-0.14	-0.19
1997	0.00			-0.21	-0.13	-0.04	-0.07	-0.03	-0.01	0.07	0.06	-0.09	-0.05
1998	0.05		-0.10	-0.05	-0.14	-0.09	-0.15	-0.10	-0.05	-0.01	0.21	0.15	-0.03
1999	0.24		0.05	0.04	-0.09	-0.09	-0.20	-0.20	-0.18	-0.27	-0.08	-0.01	-0.07

MONTHLY AVERAGE 125 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									-0.32	-0.24			-0.28
1950									0.07			0.03	0.05
1951						0.06							0.06
1957				0.01									0.01
1964			0.18	0.16	0.03	0.13		0.17	0.16	0.18	0.23		0.16
1965	0.19	-0.01	0.01	0.05	-0.08	-0.06	0.02	0.02	-0.01	0.02	0.09	0.35	0.05
1966		0.08	0.02	0.04	-0.03	-0.09	-0.03	-0.05	-0.02	0.06	0.15	0.03	0.01
1967	-0.04	-0.15	0.06	-0.12	-0.01	-0.07	-0.07	-0.12	-0.15	-0.10	0.07	-0.05	-0.06
1968	-0.16	-0.12	0.01	-0.10	-0.04	-0.09	-0.05	-0.07	0.00	0.06	0.19	0.08	-0.02
1969	0.15	0.06	0.04	-0.27	-0.20	-0.15	-0.19	-0.15	-0.03	-0.03	-0.11	0.16	-0.06
1970	-0.09	0.08	-0.10	-0.23	-0.19	-0.22	-0.12	-0.24		-0.26	-0.27		-0.16
1971	-0.14	-0.01	0.04	-0.07	-0.23	-0.23	-0.22	-0.29	-0.32	-0.42	-0.02	-0.28	-0.18
1972	-0.21	0.02	0.01	-0.04	-0.02	0.00	0.03	0.01	-0.03	-0.20	-0.20		-0.06
1973	-0.01	-0.01	0.04	0.05	-0.02	0.00	0.06	0.07	0.01	0.07	0.16	-0.05	0.03
1974	-0.20	-0.14	-0.04	0.08	0.11	0.13	0.11	0.05	0.09	0.06	0.13		0.03
1975	-0.08	0.02			-0.22	-0.17	-0.11	0.00	0.17	-0.18	-0.04	-0.17	-0.08
1976	0.04	-0.08	-0.11	-0.07	-0.09	-0.01	-0.07	-0.04	0.01	0.10	0.16	0.23	0.01
1977	0.27	0.08	-0.01	0.04	0.09	0.05	0.05	-0.05	-0.07	0.26	0.21	-0.01	0.08
1978	0.10	0.13	0.09	0.01	0.02	0.09	-0.09	-0.01	-0.04		0.01		0.03
1979	0.34	0.29		0.21	0.01	0.11	0.06	0.03	0.13	0.23	0.25	0.08	0.16
1980	-0.06		0.11	0.05	0.14	0.02	0.00	-0.01	0.02				0.03
1981	0.27		-0.29	-0.06	0.00	-0.03	-0.15		-0.17	-0.24	-0.14	0.14	-0.07
1982	0.23	0.14	0.09	0.07	0.09	0.09	0.08		-0.04	-0.02	-0.55		0.02
1983		-0.22					0.04	-0.01	0.08	-0.08	0.09	-0.22	-0.05
1984	-0.18	-0.06		-0.29	0.02	0.06	0.07	-0.05	0.13	0.06	0.04	-0.20	-0.04
1985	-0.16	-0.12	-0.08	-0.04	0.00	0.03	0.02	-0.01	0.02	-0.07	0.08		-0.03
1986	0.10	-0.08	-0.11	-0.22	-0.27	-0.26	-0.28	-0.28	-0.04	-0.01	0.05	-0.11	-0.13
1987	-0.24	0.03		0.16	0.15	0.09	0.07	-0.01	0.05	-0.03	-0.08	0.02	0.02
1988		0.17		0.04	0.09	0.22	0.20	0.17	0.08	0.00	-0.38	-0.19	0.04
1989	-0.06	-0.09		0.21	0.20	0.22	0.15	0.20	0.11	0.14	0.14	-0.02	0.11
1990	0.10	0.03	0.09	0.07	-0.04	0.01	0.05	0.01	0.02	-0.03		-0.02	0.03
1991		-0.45	-0.29	-0.17	-0.03	-0.07	-0.07	-0.13	-0.23	-0.13	-0.10	-0.12	-0.16
1992	-0.34	-0.39	-0.12	0.02	-0.24	-0.18	-0.19	-0.20	-0.18	-0.12	0.06	-0.06	-0.16
1993	0.00	-0.01	-0.07	-0.08	-0.06	0.07	-0.05	0.00	-0.02	0.02	0.07	-0.33	-0.04
1994	-0.14	-0.18		-0.07	-0.14	-0.14	-0.13	-0.01	-0.14	-0.10	-0.16	0.00	-0.11
1995		-0.07		-0.04	-0.15	-0.08	-0.09	-0.06	-0.12	-0.07	0.03	-0.07	-0.07
1996	-0.11	-0.10	-0.03	-0.29	-0.22	-0.20	-0.25	-0.25	-0.35	-0.21	-0.19	-0.08	-0.19
1997	0.03			-0.24	-0.11	-0.03	-0.06	-0.09	-0.06	0.01	-0.03	-0.11	-0.07
1998	0.14		-0.14	-0.03	-0.14	-0.08	-0.14	-0.13	-0.08	-0.04	0.09	0.12	-0.04
1999	0.15		0.12	0.06	-0.08	-0.11	-0.19	-0.23	-0.21	-0.24	-0.13	-0.16	-0.09

MONTHLY AVERAGE 150 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							-0.13	-0.01	-0.10	-0.06	-0.12	-0.13	-0.09
1947			-0.32		-0.15	-0.19	-0.28		-0.34	-0.18	-0.02		-0.21
1948				0.07	0.02	0.07	0.01	0.07					0.05
1949						-0.12		0.05	0.07			0.12	0.03
1950			0.09	0.19		0.16	0.21	0.20	0.21		0.26	-0.05	0.16
1951	-0.04	-0.07	-0.19	-0.10	-0.02	0.10	0.12	-0.07	0.15	-0.11			-0.02
1952	0.26			0.11	0.18	0.36	0.10	0.07	-0.10	-0.29		-0.14	0.06
1953		-0.06		0.36	0.28	0.13	0.06	-0.11	-0.26	-0.05	0.02	-0.15	0.02
1954	0.08	-0.02	-0.03	0.02	-0.09	0.06	0.17	0.09	0.05	0.00	0.10	0.23	0.06
1955		0.15		0.02	-0.04	-0.04	0.10	0.04	0.09		0.07	-0.02	0.04
1956	-0.08	0.11	0.03		-0.27	0.03	-0.01	-0.09	-0.18	-0.19	-0.03	-0.08	-0.07
1957	0.08	0.02	-0.05	-0.01	0.13	0.01	-0.05	0.07	-0.03	0.13	0.08	0.08	0.04
1958	0.14	0.24	0.08	0.02	-0.03	-0.09	-0.16	-0.17	-0.25	-0.16	-0.11	-0.23	-0.06
1959	-0.01	-0.06	0.07	0.00	-0.05	-0.12	-0.15	-0.16	-0.09	-0.09	-0.08	-0.13	-0.07
1960	-0.24	-0.33	-0.17	-0.10	-0.23	-0.28	-0.22	-0.31	0.01	-0.19	-0.13	-0.19	-0.20
1961	-0.20	-0.29	-0.25		-0.01	0.00	-0.07	-0.11	-0.18	-0.06	-0.04		-0.12
1962	0.25	0.05	-0.19		0.07	0.07	0.04	0.03	-0.12	0.13	0.19		0.05
1963	-0.04	0.17	-0.04	-0.11	0.06	0.05	-0.06	-0.12	-0.12	-0.08	0.04	-0.09	-0.03
1964		0.04	0.14	0.15	-0.01	0.08	0.04	0.10	0.04	0.07	0.28	0.38	0.12
1965	0.09	-0.13	0.12	0.03	-0.10	-0.12	-0.03	0.00	-0.06	-0.02	0.06	0.13	0.00
1966		0.17	0.09	0.02	-0.02	0.00	0.07	0.05	0.21	0.09	0.15	-0.01	0.07
1967	0.02	0.24	0.15	-0.13	-0.05	-0.05	-0.10	-0.11	-0.18	-0.01	0.08	-0.16	-0.03
1968	-0.26	-0.05	0.00	-0.05	0.05	-0.03	-0.02	-0.03	0.06	0.07	0.21	0.26	0.02
1969	0.25	-0.06	0.07	-0.01	-0.08	-0.16	-0.13	-0.06	0.04	0.01	-0.15	0.01	-0.02
1970	-0.17	0.07	-0.06	-0.23	-0.10	-0.19	0.02	-0.19		-0.28	-0.31	-0.51	-0.18
1971	-0.21	-0.02	0.08	-0.13	-0.25	-0.23	-0.16	-0.27	-0.16	-0.37	-0.06	-0.14	-0.16
1972	-0.09	0.10	0.01	-0.04	-0.10	-0.09	0.00	0.00	-0.06	-0.16	-0.07		-0.05
1973	-0.28	-0.08	0.04	0.03	-0.02	-0.02	0.01	0.01	-0.06	0.06	0.06	-0.21	-0.04
1974	-0.40	-0.20	-0.07	-0.03	0.06	0.05	0.08	0.00	0.04	0.00	0.06		-0.04
1975	-0.24	0.12			-0.25	-0.14	-0.05	0.07	0.22	-0.17	0.04	0.07	-0.03
1976	0.10	-0.10	-0.14	-0.09	-0.06	0.06	-0.04	-0.06	-0.01	0.00		0.09	-0.02
1977	0.15	0.08	0.06	0.01	0.11	0.04		-0.23	-0.12	-0.02	0.09	0.01	0.02
1978	0.10	0.02		-0.05	0.03	0.07	-0.18	0.02	0.00	0.19	0.00		0.02
1979	0.14	0.14	0.21	0.24	0.03	0.04	0.12	0.05	0.10	0.24	0.21	0.23	0.15
1980	0.40		0.20	0.11	0.08		-0.01	0.05	0.01				0.12
1981	0.25		-0.01	0.03	0.10	0.02	-0.15		-0.03	-0.17	-0.08	0.25	0.02
1982	0.26	0.19	0.05	0.06	0.08	0.07	0.10		0.01	-0.04	-0.25		0.05
1983		-0.29		0.00	-0.08	-0.03	0.01		0.09	-0.05	0.03	-0.16	-0.05
1984	-0.18	-0.11		-0.14	0.00	0.06	-0.03	0.06	0.06	0.04	0.01	-0.17	-0.04
1985	-0.11	-0.09	-0.12	-0.08	0.02	0.00	0.00	-0.03	-0.01	-0.05	0.02		-0.04
1986	0.00	-0.07	-0.16	-0.24	-0.29	-0.27	-0.33	-0.25	0.01	0.14	-0.13	0.02	-0.13
1987	0.01	0.10		0.14	0.18	0.08	0.11	0.00	-0.01	0.02	0.07	0.31	0.09
1988		0.10		0.06	0.12	0.23	0.20	0.21	0.08	0.08	-0.33	-0.18	0.06
1989	-0.17	-0.17		0.20	0.23	0.23	0.18	0.21	0.14	0.11	0.08	-0.01	0.09
1990	0.12	0.11	0.04	0.01	-0.06	-0.02	0.04	-0.01	-0.02	-0.13		0.06	0.01
1991		-0.46	-0.39	-0.03	-0.02	-0.08	-0.09	-0.15	-0.28	-0.18	-0.16	-0.22	-0.19
1992	-0.47	-0.41	-0.23	-0.03	-0.21	-0.21	-0.21	-0.22	-0.22	-0.06	-0.06	0.09	-0.19
1993	-0.06	0.06	-0.09	-0.07	0.00	0.04	-0.02	0.00	-0.05	-0.03	0.00	-0.16	-0.03
1994	-0.19	-0.17		-0.12	-0.17	-0.21	-0.17	0.01	-0.17	-0.03	-0.12	-0.10	-0.13
1995		-0.10		-0.05	-0.07	-0.09	-0.10	-0.04	-0.16	-0.10	-0.07	-0.09	-0.09
1996	-0.17	-0.12	-0.04	-0.19	-0.18	-0.19	-0.21	-0.22	-0.28	-0.15	-0.25	-0.22	-0.19
1997	-0.12			-0.22	-0.06	-0.02	-0.06	-0.12	-0.06	-0.05	-0.07	-0.09	-0.09
1998	0.13		-0.10	-0.07	-0.14	-0.05	-0.14	-0.16	-0.10	0.04	0.10	-0.03	-0.05
1999	-0.06		0.15	0.10	-0.03	-0.09	-0.20	-0.17	-0.17	-0.23	-0.05	-0.20	-0.09

MONTHLY AVERAGE 175 METER SALINITY ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												-0.22	-0.22
1947						-0.20	-0.30		-0.15	0.31	0.32		0.00
1948				-0.02	-0.05	0.03	0.10	0.27					0.07
1949						0.10		0.13	0.05				0.09
1950			-0.04	0.06			0.19	0.16	0.13		0.12	0.14	0.11
1951		-0.16	-0.11	-0.01	-0.01	0.13	0.05	-0.03	0.17	0.03			0.01
1952	0.22			0.15	0.27	0.35	0.13	0.13	0.09	-0.06		-0.16	0.12
1953		-0.25		0.27	0.16	0.14	0.16	-0.05	-0.04	0.05	0.09	0.04	0.06
1954	0.12	-0.01	0.00		0.01	0.15	0.18	0.07	0.11	0.13	0.14	0.23	0.10
1955	0.19	0.14		0.02	0.07	0.01	0.04	-0.02		0.00	0.12	-0.02	0.06
1956	0.12	0.23	-0.02		-0.15	0.01	-0.02	-0.11	0.04	0.01	-0.13	0.02	0.00
1957		-0.03	-0.11		0.12	0.15	0.05	0.10	-0.10	0.12	0.09	0.13	0.05
1958	0.13	0.20	0.09	0.01	0.07	0.03	-0.15	-0.19	-0.14	0.05	-0.03		0.01
1959	0.16	-0.13	-0.06	-0.03	-0.11	-0.19	-0.20	-0.19	-0.11	-0.10	-0.19	-0.16	-0.11
1960	-0.12	-0.07	-0.21	-0.14	-0.03	-0.13	-0.05	-0.22	0.04	-0.11	0.06	-0.05	-0.09
1961	-0.20	-0.33	-0.22		-0.01	-0.03	-0.04	-0.14	-0.12	-0.12	-0.08		-0.13
1962	0.11	-0.01	-0.20		0.08	0.12	0.08	0.01	-0.11	0.22	0.14		0.04
1963	0.18	0.13	0.05	-0.08	0.03	0.06	-0.03	-0.10	-0.08	-0.13	-0.03	-0.21	-0.02
1964		-0.02	0.07	0.07	-0.01	0.11	0.08	0.06	0.02	0.05	0.18	0.20	0.07
1965	-0.01	-0.11	0.14	0.04	-0.09	-0.02	0.03	-0.02	-0.08	0.12	0.02	0.00	0.00
1966		0.07	0.21	0.14	0.04	0.16	0.18	0.13	0.28	0.30	0.29	0.15	0.18
1967	0.26	0.07	0.06	-0.19	-0.05	-0.07	-0.10	-0.13	-0.10	0.07	0.08	-0.05	-0.01
1968	-0.15	0.11	0.02	0.08	0.16	-0.08	0.06	0.05	0.08	0.11	0.12	0.14	0.06
1969	0.23	-0.06	-0.04	-0.07	-0.07	-0.09	-0.18	-0.03	0.10	0.06	0.01	0.07	-0.01
1970	0.21	0.20	0.01	-0.14	-0.08	-0.13	0.02	-0.20		-0.14	-0.13	-0.30	-0.06
1971	-0.25	-0.04	0.11	-0.09	-0.22	-0.21	-0.19	-0.24	-0.17	-0.29	-0.02	-0.04	-0.14
1972	0.03	0.07	-0.02	-0.14	-0.04	-0.07	-0.07	-0.05	-0.10	-0.18	-0.07		-0.06
1973	-0.05	-0.15	-0.01	-0.07	-0.07	-0.05	0.00	0.00	-0.01	0.03	0.13	-0.15	-0.03
1974	-0.38	-0.15	-0.10	-0.04	-0.03	0.13	0.05	0.03	0.02	0.00	0.07		-0.04
1975	-0.12	0.03			-0.30	-0.20	-0.03	0.01	0.14	-0.19	0.00	0.08	-0.06
1976	0.11	-0.06	-0.13	0.09	-0.02	0.00	0.04	-0.10	-0.12	-0.07	0.35	0.20	0.02
1977	0.13	0.06	-0.04	0.00	0.11	0.04	-0.01	-0.15	-0.14	-0.12	-0.07	-0.06	-0.02
1978	0.04	0.08		-0.07	0.11	0.04	-0.20		0.00	0.09	0.01		0.01
1979	0.19	0.14	0.32	0.27	0.17	0.26	0.09	0.10	0.15	0.28	0.21	0.22	0.20
1980	0.53		0.28	0.11	0.08	0.07	0.02	0.12	0.26				0.18
1981	0.12		0.08	0.09	0.11	0.01	-0.03		-0.02	-0.07	0.17	0.25	0.07
1982	0.26	0.08	0.15	0.17	0.12	0.05	0.05		0.16	-0.11	-0.12		0.08
1983		-0.22		-0.12		0.00	-0.01	-0.06	-0.04	-0.09	-0.12	-0.20	-0.10
1984	-0.12	-0.20		-0.12	0.00	0.01	0.13	0.02	0.04	-0.05	-0.11	-0.20	-0.05
1985	-0.16	-0.10	-0.14	-0.20	-0.01	-0.03	-0.06	-0.12	-0.06	-0.11	-0.13		-0.10
1986	0.08	-0.10	-0.20	-0.34	-0.32	-0.32	-0.30	-0.08	0.01		-0.17		-0.17
1987	-0.10	-0.02		0.04	0.13	0.09	0.06	0.06	-0.05	0.08	0.14		0.04
1988				0.01	0.09	0.16	0.15	0.14	0.03	-0.01		-0.04	0.07
1989		-0.07		0.14	0.15	0.17	0.16	0.09	0.07	0.01	-0.05	-0.09	0.06
1990	0.09	0.06	-0.05	-0.06	-0.11	-0.03	-0.01	-0.03	-0.02	-0.11		-0.06	-0.03
1991		-0.46	-0.43	-0.03	0.00	-0.09	-0.11	-0.20	-0.23	-0.20	-0.17	-0.35	-0.21
1992	-0.40	-0.34	-0.22	-0.10	-0.18	-0.20	-0.15	-0.08	-0.19	-0.04	0.27	0.08	-0.13
1993	0.15	0.09	-0.09	-0.04	-0.04	0.04	-0.03	-0.02	-0.09	-0.14	-0.12	-0.04	-0.03
1994	-0.07	-0.20		-0.19	-0.19	-0.25	-0.21	0.03	-0.18	-0.01	0.03	-0.03	-0.12
1995		-0.01		0.01	-0.12	-0.09	-0.13	-0.09	-0.14	-0.04	0.04	-0.11	-0.07
1996	-0.10	-0.05	-0.06	-0.19	-0.18	-0.15	-0.17	-0.18	-0.19	-0.21	-0.24	-0.23	-0.16
1997	-0.07			-0.17	-0.05	0.00	-0.09	-0.14	-0.03	0.06	-0.01	-0.09	-0.06
1998	0.19		-0.14	-0.04	-0.10	0.06	-0.08	-0.17	-0.04	0.05	0.09	0.04	-0.01
1999	0.03		0.11		0.09	0.02	-0.09	-0.22	-0.23	-0.21	-0.01	-0.17	-0.07

Appendix C-1. Monthly averages of density by year at standard depths.

MONTHLY AVERAGE SURFACE SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						25.28	24.55	23.21	23.18	24.05	24.94	25.37	24.37
1947			26.16		25.84	25.36	24.38		23.89	24.29			24.99
1948				26.12	25.72	25.15	24.60						25.40
1949						25.07		23.51	23.92			25.60	24.53
1950			26.00	25.70		25.46	24.51	23.74	23.72		25.03	25.18	24.92
1951	25.64	25.80	25.65	25.34	25.20	24.68	24.01	24.18	23.95	24.06			24.85
1952	25.65			25.79	25.60	25.12	24.20	22.45	23.15	23.75		25.28	24.55
1953		25.72		25.23	25.38		24.06	24.04	23.92	24.31	24.81	25.50	24.77
1954	25.85	25.82	25.77	25.95	26.00	25.54	24.42	24.02	24.16	24.49	25.10	25.50	25.22
1955	25.76	25.99		25.79	25.61	25.28	24.66	23.88	23.94	24.56	24.81	25.40	25.06
1956	25.55	25.74	25.95	25.92	25.80	25.22	24.63	24.16	24.05	24.40	24.89	25.32	25.14
1957	25.77	26.10	26.14	25.96	25.56	25.03	23.90	23.89		24.04	24.41	25.33	25.10
1958	25.53	25.61	25.69	25.65	25.58	25.14	24.22	23.79	23.72	24.22	24.75	25.44	24.95
1959	25.81	26.19	26.32	26.28	25.93	25.50	24.45	23.38	23.56	24.12	24.76	25.24	25.13
1960	25.56		25.86	25.88	25.58	24.98	24.48	23.35	23.21	24.14	24.80	25.39	24.84
1961	25.70		26.07			25.02	24.28	23.45	23.75	23.80	24.57		24.58
1962	25.66	26.00	25.93		25.75	25.40	24.33	23.85	23.99	24.07	24.41		24.94
1963	25.56	25.94	26.17	26.17	25.90	25.45	24.48	24.00	23.88	24.17	24.68	25.42	25.15
1964	25.58	26.04	26.27	26.23	25.98	25.31	25.06	24.05	23.70	24.32	25.01	25.40	25.25
1965		26.14	26.02	25.92	25.87	25.02	24.48	24.12	24.07	24.49	25.14	25.59	25.17
1966		26.01	26.01	25.86	25.67	25.25	24.63	24.17	24.03	24.54	24.99	25.18	25.12
1967	25.39	25.81	26.05	25.89	25.56	25.22	24.25	23.37	23.59	24.03	24.73	25.48	24.95
1968	25.86	25.92	26.01	25.93	25.82	25.47	24.67	24.04	23.73	24.07	24.73	25.31	25.13
1969	25.77	25.71	25.85	25.86	25.67	25.10	24.72	24.05	23.77	24.27	24.83	25.12	25.06
1970	25.50	25.57	25.56	25.70	25.36	24.75	23.90	22.87		23.71	24.07	24.90	24.72
1971	25.62	25.58	25.75	25.81	25.55	24.92	24.06	23.06	23.34	24.05	24.73	25.33	24.82
1972	25.67	26.04	26.18	26.20	25.93	25.41	24.62	23.50	23.60	23.97	24.83		25.09
1973	25.83	25.91	26.03	25.56	24.93	24.76	23.92	23.53	23.54	23.95	24.91	25.33	24.85
1974	25.69	26.00	26.15	26.21	26.09	25.33	24.44	23.15	22.61	23.37	24.37		24.86
1975	25.71				25.85	25.70	24.30	23.39	23.32	24.08	24.86	25.42	24.74
1976	25.69	25.83	26.10	26.08	25.84	25.59	24.75		23.55	24.30	25.25	25.60	25.33
1977	25.91	26.22	26.21	26.08	25.89	25.12	24.38	23.50	23.33	23.81	24.56	25.39	25.03
1978	25.63	25.93		25.90	25.81	25.67	24.54		23.75	24.41	25.03		25.19
1979	25.83	25.94	26.07	26.12	25.72	25.12	24.33	23.30	23.59	24.32	24.80	25.33	25.04
1980	25.70		26.06	25.96	25.76	25.23	24.57	23.80	23.89				25.12
1981	25.74		26.07	25.87	25.58	25.15	24.24		23.34		24.64	25.29	25.10
1982	25.80	26.13	26.27	26.19	25.92	25.45	24.82		23.48	24.06	24.41		25.25
1983		25.74		25.23	25.03	24.86	23.83		23.27	23.68	24.42	25.04	24.57
1984	25.42	25.74		25.45	25.03	24.79	23.24	22.69	22.89	23.54	24.49	25.11	24.40
1985	25.68	25.88	26.10	26.10	25.90	25.52	24.71	23.48	23.17	23.68	24.63		24.99
1986	25.70	25.96	26.00	25.95	25.68	25.19	24.41	23.63		24.35	24.85	25.54	25.21
1987	25.88	25.96		25.50	25.48	25.21	24.17	23.70	24.05	24.24	24.83	25.36	24.94
1988		25.99		26.04	25.73	25.29	24.58	23.69	23.44	23.87	24.80	25.25	24.87
1989	25.62	25.85		26.18	26.10	25.55	24.61	23.85	23.48	24.39	25.04	25.60	25.12
1990	25.83	26.11	26.14	26.15	26.11	25.55	24.60	23.85	23.58	23.70		25.52	25.19
1991		25.94	25.97	25.69	25.39	24.81	23.86	23.74	23.65	23.50	24.00	24.81	24.67
1992	25.04	24.41		26.05	25.81	25.22	24.28	23.58	23.57	24.14	24.72	25.25	24.73
1993	25.65	25.80	25.61	25.59	25.65	25.21	24.46	23.61	23.93	24.33	24.80	25.33	25.00
1994	25.71	25.87		25.93	25.70	25.29	24.16	22.39	22.78	24.05	24.62	25.22	24.70
1995		25.70		25.35	24.82	24.50	23.89	23.07	23.25	23.82	24.81	25.37	24.46
1996	25.64	25.71	25.88	25.87	25.73	25.32	24.65	23.67	23.27	23.97	24.62	25.21	24.96
1997	25.55			26.30	25.51	25.53	24.26	23.47	23.48	23.77	24.54	25.28	24.77
1998	25.56		25.88	25.76	25.26	24.73	23.84	23.16	23.71	24.10	24.74	25.42	24.74
1999	25.74		25.94	25.67	25.44	24.93	23.48	22.80	23.07	23.94	24.74	25.26	24.64

MONTHLY AVERAGE 10 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						25.56							25.56
1959	25.88	26.20	26.40	26.30	26.01	25.56	24.57	23.54	23.62	24.15	24.87	25.26	25.20
1960	25.55		25.90	25.92	25.61	25.06	24.57	23.81	23.22	24.12	24.83	25.41	24.91
1961	25.72	26.00	26.06			25.02	24.40	23.69	23.83	23.89	24.58		24.80
1962	25.67	26.01	25.98		25.80	25.43	24.48	24.02	23.96	24.15	24.55		25.01
1963	25.58	25.93	26.17	26.16	25.90	25.44	24.64	24.12	23.92	24.21	24.71	25.38	25.18
1964	25.58	25.96	26.24	26.25	26.10	25.41	25.10	24.29	23.79	24.35	25.07	25.46	25.30
1965	25.74	26.03	25.99	25.99	25.83	25.07	24.61	24.17		24.50	25.18	25.58	25.34
1966		26.09	26.01	25.88	25.81	25.37	24.67	24.25	24.07	24.52	24.92	25.18	25.16
1967	25.32	25.73	26.08	25.96	25.64	25.28	24.32	23.44	23.60	23.97	24.74	25.51	24.97
1968	25.84	25.90	25.98	25.92	25.83	25.52	24.77	24.15	23.77	24.07	24.73	25.32	25.15
1969	25.83	25.87	25.88	25.86	25.72	25.18	24.77	24.03	23.82	24.32	24.89	25.14	25.11
1970	25.50	25.57	25.62	25.72	25.39	24.79	24.18	23.08		23.79	24.09	24.96	24.79
1971	25.64	25.60	25.78	25.85	25.59	24.97	24.23	23.16	23.28	24.01	24.80	25.35	24.86
1972	25.69	26.03	26.20	26.24	25.97	25.47	24.71	23.55	23.65	23.95	24.84		25.12
1973	25.81	25.95	26.09	25.88	25.03	24.89	23.96	23.54	23.45	23.98	24.94	25.41	24.91
1974	25.72	25.98	26.17	26.27	26.09	25.35	24.49	23.36	22.70	23.35	24.33		24.89
1975	25.69	26.03			25.91	25.72	24.51	23.51	23.53	24.11	24.91	25.44	24.94
1976	25.69	25.93	26.06	26.14	25.94	25.61	25.20	24.19	23.62	24.27	25.22	25.53	25.28
1977	25.85	26.14	26.06	26.08	25.94	25.18	24.76	23.74	23.36	23.84	24.59	25.40	25.08
1978	25.68	25.93	25.97	25.94	25.71	25.68	24.69	23.49	23.72	24.45	25.17		25.13
1979	25.82	26.02	26.11		25.89	25.38	24.57	23.47	23.56	24.33	24.80	25.33	25.03
1980	25.66		26.01	25.96	25.76		24.65	24.32	23.96				25.19
1981	25.60		25.97	25.87	25.59	25.21	24.35		23.46	24.03	24.62	25.16	24.99
1982	25.78	26.11	26.26	26.22	25.94	25.45	25.00		23.53	24.01	24.42		25.27
1983		25.87		25.39	25.04	24.87	24.09	23.72	23.40	23.72	24.43	25.06	24.56
1984	25.50	25.74		25.77	25.38	25.11	23.96	23.64	22.97	23.55	24.51	25.14	24.66
1985	25.68	25.88	26.10	26.12	26.03	25.63	24.93	23.66	23.20	23.68	24.70		25.06
1986	25.71	26.00	26.07	25.98	25.70	25.19	24.43	23.77	23.85	24.33	24.86	25.55	25.12
1987	25.88	25.96		25.82	25.58	25.32	24.43	23.85	24.06	24.25	24.84	25.36	25.03
1988		25.99		26.05	25.78	25.39	25.17	24.24	23.48	23.88	24.84	25.27	25.01
1989	25.62	25.89		26.20	26.17	25.60	24.62	23.93	23.51	24.48	25.05	25.61	25.15
1990	25.85	26.14	26.17	26.16	26.15	25.59	24.70	24.08	23.66	23.62		25.50	25.24
1991		25.94	25.97	25.72	25.42	24.93	24.10	23.84	23.70	23.59	24.12	24.85	24.74
1992	25.22	25.25	26.06	26.03	25.82	25.38	24.49	23.59	23.63	24.21	24.69	25.25	24.97
1993	25.65	25.80	25.93	25.81	25.55	25.27	24.70	23.81	24.15	24.34	24.83	25.34	25.10
1994	25.72	25.85		25.95	25.78	25.37	24.24	22.75	22.75	24.06	24.64	25.24	24.76
1995		25.71		25.44	25.13	24.65	24.01	23.11	23.31	23.89	24.85	25.33	24.54
1996	25.65	25.71	25.87	25.87	25.74	25.32	24.71	23.82	23.29	23.98	24.64	25.22	24.99
1997	25.56			25.91	25.57	25.23	24.42	23.55	23.49	23.81	24.55	25.29	24.74
1998	25.55		25.89	25.82	25.31	24.84	24.02	23.36	23.87	24.12	24.75	25.42	24.81
1999	25.74		25.99	25.78	25.48	25.00	23.69	22.87	23.10	23.94	24.76	25.28	24.69

MONTHLY AVERAGE 20 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										24.18			24.18
1954		25.87		25.90									25.89
1955					25.80			24.62					25.21
1956										24.72			24.72
1957		26.08		26.14		25.34							25.85
1958									23.72				23.72
1959	25.99	26.24	26.37	26.33	26.01	25.59	25.25	24.39	23.70	24.15	24.92	25.30	25.35
1960	25.57		25.94	25.92	25.68	25.23	25.44	24.40	23.32	24.16		25.46	25.11
1961	25.75	26.02	26.09			25.57	25.13	24.81	24.01	24.00	24.60		25.11
1962	25.67	26.03	26.07		25.83	25.51	25.34	25.35	24.15	24.23	24.63		25.28
1963	25.69	25.98	26.18	26.18	25.99	25.62	24.72	24.44	24.07	24.23	24.72	25.40	25.27
1964	25.58	25.99	26.25	26.28	26.03	25.83	25.51	24.70	24.03	24.40	25.20	25.51	25.44
1965	25.74	26.04	26.01	26.00	25.88	25.29	25.29	25.21	25.03	24.58	25.15	25.59	25.48
1966		26.09	26.08	25.92	25.94	25.49	25.50	25.29	24.23	24.61	24.93	25.19	25.39
1967	25.34	25.77	26.02	26.06	25.91	25.49	25.32	24.82	23.82	24.01	24.83	25.53	25.24
1968	25.84	25.91	26.00	25.96	25.86	25.66	24.89	24.60	23.90	24.12	24.82	25.32	25.24
1969	25.84	25.87	25.91	25.88	25.73	25.53	25.30	24.25	23.89	24.35	24.95	25.16	25.22
1970	25.50	25.69	25.68	25.75	25.54	24.94	24.55	23.91		23.84	24.15	25.03	24.96
1971	25.69	25.65	25.85	25.88	25.62	25.24	24.89	23.96	23.41	24.01	24.81	25.37	25.03
1972	25.71	26.03	26.21	26.25	26.03	25.69	25.05	23.87	23.79	23.96	24.87		25.22
1973	25.91	25.98	26.12	26.05	25.50	25.65	25.20	24.25	23.52	24.03	24.97	25.41	25.22
1974	25.72	26.00	26.17	26.28	26.11	25.39	24.80	24.54	23.52	23.42	24.40		25.12
1975	25.73	26.00			26.01	25.82	25.44	25.23		24.24	24.97	25.44	25.43
1976	25.71		26.11	26.13	25.98	25.69	25.49	24.56	23.73	24.29	25.22	25.57	25.32
1977	25.92	26.14	26.08	26.11	26.05	25.50	25.36	24.18	23.85	23.87	24.71	25.43	25.27
1978	25.74	25.93	25.98	26.01	25.81	25.78	24.84	23.72	23.79	24.46	25.18		25.20
1979	25.89	26.01	26.11		25.95	25.94	25.52	24.13	23.56	24.27	24.79	25.20	25.22
1980			26.04	26.01	25.81	25.45	25.57	25.15	24.11				25.45
1981	25.66		25.99	25.91	25.76	25.54	24.41		23.74	24.22	24.65	25.17	25.11
1982	25.84	26.11	26.27	26.26	26.01	25.52	25.53		23.62	24.04	24.50		25.37
1983		25.87		25.66	25.27	25.20	24.98	24.19	23.57	23.74	24.42	25.10	24.80
1984	25.50	25.76		25.89	25.75	25.78	24.89	24.55	23.49	23.66	24.55	25.18	25.00
1985	25.70	25.88	26.11	26.16	26.10	25.80	25.52	24.63	23.42	23.70	24.82		25.26
1986	25.72	26.02	26.10	26.02	25.78	25.39	24.54	24.80	24.04	24.37	24.86	25.55	25.27
1987	25.88	25.97		25.97	25.71	25.58	25.24	24.44	24.40	24.28	24.89	25.36	25.25
1988		25.99		26.10	25.91	25.56	25.99	25.42	23.63	24.07	25.00	25.27	25.29
1989	25.62	25.91		26.23	26.25	25.79	24.94	24.78	23.70	24.62	25.07	25.64	25.32
1990	25.86	26.17	26.20	26.19	26.17	25.76	25.26	24.72	24.60	23.87		25.52	25.48
1991		25.94	25.97	25.84	25.62	25.28	25.43	24.91	24.19	23.94	24.12	24.95	25.11
1992	25.31	25.41	26.06	26.12	25.85	25.51	24.75	24.27	23.96	24.32	24.76	25.25	25.13
1993	25.66	25.87	26.04	25.93	25.72	25.39	24.76	24.16	24.54	24.34	24.85	25.34	25.22
1994	25.72	25.84		26.06	25.81	25.54	24.74	24.00	23.00	24.16	24.74	25.34	25.00
1995		25.85		25.55	25.37	24.95	24.70	23.84	23.85	24.06	24.90	25.35	24.84
1996	25.68	25.72	25.91	25.92	25.82	25.41	25.11	24.68	23.66	24.05	24.69	25.24	25.16
1997	25.60			25.93	25.68	25.56	25.39	24.34	23.59	24.02	24.59	25.31	25.00
1998	25.56		25.89	25.87	25.58	25.43	24.93	25.39	24.16	24.15	24.79	25.46	25.20
1999	25.79		26.03	25.85	25.61	25.38	24.91	24.28	23.75	23.97	24.84	25.29	25.06

MONTHLY AVERAGE 30 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						25.86	24.96	24.44	24.02	24.06	25.00	25.52	24.84
1947			26.25		25.96	25.54	25.07			24.42	25.28		25.42
1948				26.24	26.15	25.85	25.61	25.72					25.91
1949						25.39		25.07	24.58			25.60	25.16
1950			26.32	26.40		25.68	25.39	25.34	24.66		25.12	25.28	25.52
1951	25.69	25.82	25.74	25.62	25.60	25.61	25.67	25.56	24.16	24.14			25.36
1952	25.85			26.05	25.89	25.95	25.69	25.49		23.72		25.34	25.50
1953		25.75		25.80	25.72	25.54	25.19	24.96	24.24	24.35	24.89	25.51	25.20
1954	25.91	25.91	25.78		26.08	25.83	25.72	25.95		24.80	25.20	25.76	25.69
1955	25.84	26.11		25.85		25.62	25.10	24.63	24.10	24.71	24.99	25.46	25.24
1956	25.59	25.84	25.96	25.95	25.90	25.62	25.72	25.97	24.82	24.53	24.96	25.34	25.52
1957	25.68		26.23		25.65	25.27	25.39	25.78	24.58	24.17	24.75	25.43	25.29
1958		25.87	25.81	25.77	25.77	25.46	24.76	23.86		24.29	24.85	25.54	25.20
1959	25.96	26.24	26.37	26.33	26.03	25.69	25.71	25.58		24.27	24.96	25.34	25.68
1960	25.64	25.74	25.91	25.92	25.78	25.82	25.97	25.63	24.00	24.44	24.86	25.47	25.43
1961	25.76	26.02	26.10		25.58	26.07	25.86	25.49	24.53	24.07	24.65		25.41
1962	25.67	26.03	26.08		25.90	25.77	25.91	25.88	24.41	24.39	24.67		25.47
1963	25.72	25.99	26.18	26.19	26.07	25.77	25.77		24.53	24.26	24.75	25.42	25.51
1964	25.62	26.03	26.25	26.29	26.21	26.23	25.86	25.32	24.32	24.79	25.27	25.55	25.65
1965	25.78	26.03	26.01	26.01	25.91	25.42	25.97	25.84	25.56	24.71	25.30	25.60	25.68
1966		26.09	26.10	25.95	26.00	25.73	25.96	25.70	24.45	24.98	25.08	25.25	25.57
1967	25.41	25.81	26.08	26.08	26.01	25.86	25.93	25.74	24.89	24.18	24.97	25.54	25.54
1968	25.82	25.91	26.01	25.97	25.93	25.83	25.22	25.26	24.34	24.20	24.85	25.37	25.39
1969	25.85	25.87	25.92	25.90	25.80	25.73	25.66	25.57	24.83	24.55	25.10	25.25	25.50
1970	25.57	25.68	25.74	25.76	25.71	25.35	24.96	24.32		24.01	24.20	25.07	25.12
1971	25.71	25.74	25.91	25.89	25.76	25.76	25.54	24.74	24.34	24.32	24.88	25.37	25.33
1972	25.71	26.04	26.22	26.26	26.10	26.07	25.80	25.17	24.39	24.28	24.87		25.54
1973	25.92	25.98	26.14	26.18	25.94	25.95	25.80	25.00	23.69	24.04	25.09	25.43	25.43
1974	25.73	26.04	26.22	26.29	26.21	25.55	25.22	25.63	24.62	23.73	24.38		25.42
1975	25.73	26.01			26.06	25.96	25.78	25.64		24.92	25.03	25.52	25.63
1976	25.74	25.93	26.08	26.15	26.10	25.83	25.67	25.47	24.55	24.36	25.22	25.57	25.56
1977	25.92	26.18	26.14	26.17	26.16	25.67	25.73	24.87	24.44	23.99	24.84	25.45	25.46
1978	25.77	26.00	26.01	26.09	25.91	26.27	25.96	25.48	24.23		25.39		25.71
1979	25.91		26.14	26.19	25.98	26.12	26.08	25.27	23.76	24.33	24.82	25.39	25.45
1980	25.64		26.05	26.07	25.89	25.81	26.05	25.43	24.33				25.66
1981	25.72		26.02	25.96	25.98	25.98	26.10		24.93	24.32	24.78	25.18	25.50
1982	25.87	26.12	26.29	26.29	26.16	25.74	26.06		24.73	24.19	24.55		25.60
1983		25.88		26.10	26.00	26.26	25.88	25.26	24.27	23.82	24.46	25.14	25.31
1984	25.52	25.69		25.92	25.92	25.95	25.59	25.34	24.92	24.21	24.57	25.34	25.36
1985	25.74	25.93	26.13	26.17	26.19	26.14	26.09	25.67	23.92	23.76	24.87		25.51
1986	25.73	26.02	26.12	26.08	25.92	25.80	25.38	25.61	24.28	24.40	24.94	25.59	25.49
1987	25.88	25.99		26.14	26.13	25.74	25.69	25.44	25.33	24.47	24.99	25.36	25.56
1988		25.99		26.13	25.99	26.06	26.32	26.01	24.44	24.59	25.49	25.23	25.63
1989		25.92		26.28	26.32	26.15	25.68	25.63	25.22	24.93	25.11	25.70	25.69
1990	25.90	26.20	26.25	26.21	26.19	25.94	25.77	26.06	25.58	24.23		25.55	25.81
1991		25.94	25.97	25.92	25.79	25.63	25.84	25.77	24.43	24.77	24.18	25.00	25.39
1992	25.33	25.42	26.10	26.18	25.90	25.73	25.11	25.06	24.47	24.43	24.89	25.26	25.32
1993	25.72	25.97	26.09	25.99	25.79	25.60	25.08	25.25	25.05	24.95	24.90	25.34	25.48
1994	25.72	25.84		26.08	25.94	25.97	25.82	25.58	23.86	24.19	24.92	25.43	25.40
1995		25.90		25.83	25.59	25.70	25.40	25.16	24.51	24.81	25.03	25.40	25.33
1996	25.69	25.73	25.94	25.95	25.91	25.65	25.32	25.30	24.04	24.22	24.95	25.28	25.33
1997	25.65			25.96	25.78	25.79	25.75	25.84	24.83	24.18	24.62	25.35	25.38
1998	25.57		25.90	25.94	25.74	25.61	25.52	25.97	24.94	24.50	24.94	25.51	25.47
1999	25.86		26.05	25.88	25.87	25.76	25.77	25.50	24.63	24.37	24.90	25.32	25.45

MONTHLY AVERAGE 50 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						26.28	25.97	25.67	25.53	24.61	25.27	25.65	25.57
1947			26.29		26.11	26.04	25.83		25.77		25.76		25.97
1948				26.37	26.25	26.26	26.14	26.15					26.23
1949						26.00		26.26	25.73			25.75	25.94
1950				26.48		26.25	26.48	26.33	26.27		25.45	25.60	26.12
1951	25.89		25.90	25.85	25.87	26.21	26.14	26.16		25.75			25.97
1952	26.02			26.17	26.30	26.40	26.42	26.19		25.19		25.46	26.02
1953		25.81		26.15	26.34	26.31	26.18	25.97	25.41	24.91	25.01	25.61	25.77
1954	25.91	25.98	25.95	26.05	26.17	26.25	26.35	26.43	26.38	25.57	25.25	25.83	26.01
1955	25.92	26.16		25.92	26.11	26.31	26.39	26.06	25.50	25.23	25.41	25.66	25.88
1956	25.89	25.95	25.98	26.05	26.16	26.29	26.28	26.30	25.86	25.20	25.10	25.40	25.87
1957	25.81	26.11	26.16	26.12	26.13	26.04	26.08	26.30	25.74	25.34	25.26	25.50	25.88
1958		26.02	25.86	25.91	26.09	26.10	26.05	25.89	25.31	25.04	25.10	25.64	25.73
1959		26.34	26.39	26.39	26.26	26.01	26.05	26.03		25.05	25.25	25.36	25.91
1960	25.63		25.98	26.04	26.08	26.08	26.13	26.06	25.73	25.46	25.08	25.63	25.81
1961	25.79	26.03	26.13		26.02	26.27	26.24	26.04	25.46		25.00		25.89
1962	25.69	26.06	26.11		26.06	26.17	26.19	26.26	25.73	25.14	25.24		25.87
1963	25.80	26.03	26.20	26.24	26.21	26.31	26.36	26.18	25.80	25.09	25.47	25.54	25.94
1964	25.61	26.03	26.25	26.34	26.29	26.44	26.46	26.33	25.70	25.43	25.41	25.78	26.01
1965	25.85	26.03	26.01	26.15	26.09	26.02	26.24	26.32	25.77	25.12	25.45	25.65	25.89
1966		26.21	26.15	26.00	26.14	25.98	26.16	26.15	25.73	25.38	25.19	25.26	25.85
1967	25.52	25.97	26.09	26.12	26.23	26.27	26.35	26.29	25.71	25.22	25.47	25.67	25.91
1968	25.85	25.93	26.06	26.05	25.96	25.99	25.91	25.81	25.21	24.24	24.83	25.48	25.61
1969	25.89	25.87	25.95	25.95	25.97	26.02	26.10	26.18	25.60	24.76	25.34	25.78	25.78
1970	25.88	25.90	25.87	25.82	25.95	26.02	26.10	26.14		24.23	24.53	25.12	25.60
1971	25.83	25.79	26.01	25.95	26.02	26.08	25.94	25.80	25.48	24.84	25.06	25.41	25.68
1972	25.72	26.05	26.28	26.29	26.22	26.27	26.34	26.23	25.86	25.74	25.31		26.03
1973	26.05	26.06	26.15	26.23	26.20	26.28	26.23	26.04	25.07	24.99	25.49	25.46	25.85
1974	25.74	26.07	26.22	26.31	26.34	26.16	26.14	26.25	25.88	24.50	24.72		25.85
1975	25.89	26.11			26.14	26.09	26.13	26.19	26.28	25.48	25.33	25.69	25.93
1976	25.90	25.98	26.11	26.25	26.22	26.07	26.07	25.99	25.64	25.01	25.36	25.59	25.85
1977	25.97	26.18	26.18	26.23	26.38	26.36	26.29	26.03	25.21	25.08	25.12	25.53	25.88
1978	25.82	26.07	26.27	26.23	26.23	26.46	26.31	26.02	24.65		25.52		25.96
1979	25.92	26.17	26.18	26.22	26.07	26.32	26.37	26.18	25.29	25.29	25.12	25.46	25.88
1980	25.69		26.09	26.08	26.06	26.18	26.28	25.95	25.15				25.94
1981	25.75		26.08	26.11	26.21	26.21	26.23		25.82	24.86	24.98	25.29	25.75
1982	25.98	26.13	26.32	26.39	26.34	26.34	26.43		25.82	25.21	24.59		25.96
1983		25.88		26.30	26.19	26.42	26.34	26.17	25.80	24.50	24.66	25.24	25.75
1984	25.61	25.87		25.95	26.09	26.25	26.32	25.83	25.63	24.63	24.79	25.63	25.69
1985	25.85	26.02	26.18	26.21	26.26	26.31	26.36	26.27	25.94	24.44	25.09		25.90
1986	25.81	26.11	26.16	26.13	26.12	26.17	26.10	26.04	25.47	24.65	25.08	25.63	25.79
1987	25.88	26.06		26.36	26.43	26.28	26.16	25.97	25.85	25.76	25.54	25.37	25.97
1988		26.09		26.24	26.21	26.39	26.55	26.41	26.01	25.79	25.74	25.32	26.08
1989	25.71	25.98		26.38	26.47	26.41	26.25	26.23	25.70	25.54	25.41	25.77	25.99
1990	25.92	26.21	26.28	26.32	26.25	26.23	26.23	26.25	26.07	25.08		25.65	26.04
1991		25.95	25.98	26.02	26.04	25.96	26.16	26.11	25.42	25.96	25.03	25.20	25.80
1992	25.58	25.64	26.15	26.26	26.06	26.16	25.96	26.03	25.82	25.28	25.17	25.33	25.79
1993	25.85	26.07	26.17	26.12	25.91	26.11	25.74	26.14	26.07	25.55	25.27	25.35	25.86
1994	25.73	25.83		26.14	26.04	26.22	26.25	26.20	25.47	24.75	25.18	25.54	25.76
1995		25.96		26.01	25.89	26.10	26.12	26.05	25.71	25.68	25.42	25.47	25.84
1996	25.73	25.77	26.02	26.00	26.08	25.99	25.88	25.93	25.09	24.95	25.23	25.37	25.67
1997	25.69			26.04	26.07	26.14	26.18	26.24	25.91	25.82	25.40	25.48	25.90
1998	25.60		25.93	26.08	26.01	26.06	26.23	26.27	25.97	25.41	25.37	25.64	25.87
1999	25.87		26.11	25.99	26.05	26.15	26.11	26.02	25.69	25.38	25.17	25.49	25.82

MONTHLY AVERAGE 75 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			26.23		26.30	26.23	26.10						26.22
1948				26.41	26.41	26.48	26.34	26.27					26.38
1949						26.44		26.46	26.27			25.89	26.27
1950			26.44	26.54		26.50	26.69	26.66	26.29		25.78	25.82	26.34
1951	25.99	25.93	26.01	26.07	26.14	26.35	26.39	26.29	26.18	26.01			26.14
1952	26.16			26.33	26.51	26.63	26.61	26.46		26.05		25.84	26.32
1953		26.05		26.32	26.44	26.46	26.38	26.19	25.79	25.79	25.35	25.81	26.06
1954	26.05	25.99	26.05	26.07	26.25	26.35	26.53	26.55	26.50	26.13	25.58	25.95	26.17
1955	25.98	26.19		26.06	26.24	26.42	26.57	26.50	26.25	25.86	25.73	25.83	26.15
1956	26.08	26.06	26.10	26.14	26.26	26.44	26.46	26.40	26.29	26.04	25.76	25.99	26.17
1957	26.01	26.16	26.20	26.20	26.36	26.38	26.30	26.48	26.29	26.21	25.82	25.80	26.18
1958	25.82	26.02	26.02	26.12	26.26	26.33	26.29	26.24	25.94	25.82	25.45	25.71	26.00
1959	26.17	26.34	26.41	26.42	26.36	26.31	26.36	26.30	25.99	26.01	25.86	25.57	26.18
1960	25.79	25.92	26.01	26.07	26.17	26.21	26.26	26.24	26.23	25.99	25.73	25.93	26.05
1961	25.99	26.06	26.16		26.27	26.39	26.42	26.24	25.95	25.84	25.67		26.10
1962	26.02	26.14	26.16		26.23	26.42	26.42	26.46	26.30	26.13	26.07		26.24
1963	25.96	26.06	26.24	26.28	26.34	26.42	26.44	26.42	26.20	25.93	25.93	25.86	26.17
1964	25.69	26.16	26.28	26.40	26.38	26.52	26.59	26.57	26.46	26.15	25.60	26.07	26.24
1965	26.09	26.06	26.10	26.31	26.26	26.21	26.43	26.44	26.27	26.07	25.95	25.83	26.17
1966		26.23	26.23	26.10	26.28	26.13	26.36	26.36	26.26	26.15	25.81	25.71	26.15
1967	25.70	26.05	26.17	26.19	26.39	26.39	26.43	26.43	26.08	25.87	25.87	25.80	26.11
1968	25.87	26.06	26.20	26.15	26.13	26.08	26.12	26.19	26.09	26.04	25.52	25.66	26.01
1969	25.98	25.98	26.06	26.03	26.13	26.19	26.29	26.30	26.21	25.92	25.90	26.08	26.09
1970	25.97	26.03	26.04	25.95	26.09	26.17	26.33	26.30		25.63	25.61	25.47	25.96
1971	25.95	26.05	26.21	26.20	26.21	26.22	26.22	26.04	25.95	25.25	25.72	25.62	25.97
1972	25.73	26.06	26.35	26.34	26.30	26.40	26.53	26.44	26.36	26.06	25.75		26.21
1973	26.15	26.14	26.23	26.34	26.43	26.40	26.42	26.38	26.07	26.15	26.16	25.67	26.21
1974	25.78	26.13	26.29	26.43	26.47	26.51	26.47	26.49	26.38	26.27	25.99		26.29
1975	25.93	26.14			26.26	26.24	26.30	26.35	26.35	25.78	25.71	25.84	26.09
1976	26.03	26.03	26.17	26.31	26.34	26.31	26.22	26.22	26.01	25.86	25.52	25.66	26.06
1977	26.00	26.24	26.22	26.29	26.49	26.48	26.55	26.36	26.32	26.08	25.75	25.62	26.20
1978	25.94	26.13	26.27	26.24	26.40	26.51		26.42	26.12	26.38	26.06		26.25
1979	26.17	26.38	26.32		26.32	26.45	26.47	26.43	26.36	26.29	25.73	25.56	26.23
1980	25.63		26.19	26.22	26.30	26.31	26.41	26.34	26.14				26.19
1981	26.06		26.18	26.17	26.35	26.36	26.32		26.16	25.80	25.49	25.71	26.06
1982	26.12	26.17	26.36	26.45	26.48	26.50	26.52		26.25	25.77	24.96		26.16
1983		25.94		26.40	26.34	26.50	26.49	26.39	26.20	26.05	25.73	25.46	26.15
1984	25.72	26.04		25.99	26.26	26.41	26.48	26.26	26.20	25.97	25.48	25.82	26.06
1985	25.94	26.09	26.23	26.24	26.35	26.41	26.45	26.44	26.35	26.04	25.75		26.21
1986	25.92	26.13	26.20	26.17	26.23	26.26	26.24	26.23	26.07	25.69	25.95	25.73	26.07
1987	25.94	26.17		26.44	26.53	26.47	26.39	26.24	26.23	26.08	25.90	25.52	26.17
1988		26.20		26.33	26.38	26.52	26.61	26.55	26.34	26.20	25.90	25.56	26.26
1989	25.88	26.04		26.44	26.55	26.55	26.51	26.46	26.17	26.12	25.82	25.90	26.22
1990	25.95	26.23	26.33	26.36	26.33	26.40	26.46	26.39	26.27	26.02		25.80	26.23
1991		25.96	26.02	26.18	26.35	26.24	26.38	26.31	26.12	26.25	25.97	25.47	26.11
1992	25.65	25.75	26.20	26.30	26.19	26.28	26.31	26.30	26.20	25.86	25.83	25.66	26.04
1993	26.06	26.16	26.21	26.20	26.27	26.40	26.29	26.40	26.36	26.11	25.83	25.48	26.15
1994	25.80	25.87		26.19	26.22	26.33	26.38	26.38	26.01	25.34	25.80	25.76	26.01
1995		26.11		26.17	26.08	26.24	26.30	26.34	26.05	26.09	25.93	25.72	26.10
1996	25.80	26.01	26 12	26.04	26.16	26.17	26.18	26.14	25.74	25.85	25.64	25.54	25.95
1997	25.83			26.09	26.22	26.33	26.38	26.39	26.28	26.29	26.08	25.74	26.16
1998	25.79		26.15	26.20	26.15	26.29	26.32	26.33	26.23	26.23	26.03	25.89	26.15
1999	26.06		26.24	26.17	26.22	26.28	26.26	26.21	26.06	25.90	25.70	25.68	26.07

MONTHLY AVERAGE 100 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						26.51	26.38	26.38	26.41	26.30	25.97	25.76	26.24
1947			26.23		26.38	26.34	26.26		26.12	26.21			26.26
1948				26.44	26.50	26.54	26.50	26.49					26.49
1949						26.55		26.59	26.56			26.18	26.47
1950				26.65		26.63	26.75	26.72	26.49		26.08	26.16	26.50
1951	26.21	26.09	26.11	26.23	26.36	26.45	26.54		26.37	26.26			26.29
1952	26.27			26.48	26.62	26.90	26.75	26.60		26.21		26.09	26.49
1953		26.18		26.49	26.57		26.56	26.42		26.33	26.10	26.06	26.34
1954	26.30	26.22	26.22	26.26	26.31	26.51	26.68	26.64	26.64	26.45	26.07	26.13	26.37
1955	26.03	26.23		26.30	26.36	26.50	26.63	26.61	26.54		26.12	26.02	26.33
1956	26.10	26.22	26.16	26.27		26.54	26.53	26.49	26.44	26.26	26.01	26.01	26.28
1957	26.07	26.25	26.27	26.33	26.50	26.51	26.45	26.59	26.39	26.34	26.17	26.07	26.33
1958	25.91	26.13	26.17	26.27	26.39	26.40	26.41	26.36	26.26	26.07	25.97	26.01	26.20
1959	26.29	26.40	26.46	26.46	26.46	26.44	26.42	26.43	26.33	26.42	26.22	25.82	26.35
1960	25.93	26.02	26.11	26.20	26.26	26.23	26.33	26.31	26.37	26.27	26.16	26.05	26.19
1961	26.08	26.12	26.16		26.39	26.47	26.51	26.36	26.25	26.14	26.10		26.26
1962	26.20	26.22	26.17		26.44	26.53	26.53	26.54	26.34	26.43	26.34		26.37
1963	26.18	26.10	26.25	26.34	26.44	26.51	26.54	26.48	26.40	26.32	26.22	26.13	26.33
1964		26.47	26.41	26.48	26.46	26.58	26.65	26.67	26.61	26.58	26.14	26.21	26.48
1965	26.31	26.14	26.16	26.36	26.37	26.47	26.54	26.50	26.45	26.38	26.31	26.39	26.37
1966		26.25	26.33	26.33	26.39	26.35	26.46	26.45	26.37	26.32	26.31	26.05	26.33
1967	25.88	26.10	26.29	26.30	26.46	26.46	26.46	26.43	26.30	26.23	26.20	26.00	26.26
1968	25.94	26.14	26.30	26.26	26.33	26.36	26.38	26.36	26.38	26.33	26.27	26.02	26.26
1969	26.14	26.08	26.25	26.11	26.25	26.29	26.37	26.38	26.33	26.22	26.24	26.32	26.25
1970	26.08	26.23	26.21	26.20	26.25	26.30	26.40	26.35		26.17	26.10	25.68	26.18
1971	25.99	26.25	26.34	26.35	26.31	26.31	26.33	26.25	26.15		26.14	25.85	26.21
1972	25.93	26.20	26.36	26.34	26.39	26.44	26.57	26.56	26.46	26.17	25.93		26.30
1973	26.18	26.31	26.35	26.42	26.45	26.47	26.56	26.55	26.36	26.45	26.48	26.10	26.39
1974	25.90	26.23	26.35	26.49	26.56	26.58	26.64	26.59	26.58	26.42	26.42		26.43
1975	26.07	26.24			26.29	26.29	26.41	26.49	26.51	26.17	26.09	25.88	26.24
1976	26.14	26.16	26.26	26.36	26.36	26.44	26.39	26.41	26.32	26.41	26.19	26.00	26.29
1977	26.28	26.38	26.27	26.37	26.55	26.52	26.62	26.47	26.41	26.37	26.34	25.94	26.38
1978	26.07	26.26	26.25	26.40	26.46	26.60		26.50	26.38	26.62	26.26		26.38
1979	26.38	26.48	26.46	26.42	26.38	26.58	26.57	26.53	26.53	26.51	26.42	25.94	26.43
1980	25.97		26.42	26.44	26.44	26.49	26.50	26.46	26.43				26.39
1981	26.24		26.23	26.27	26.44	26.45	26.40		26.32	26.17	25.98	26.08	26.26
1982	26.28	26.22	26.41	26.47	26.53	26.55	26.57		26.37	26.37			26.42
1983		26.03		26.48	26.39	26.58	26.55	26.49	26.49	26.37	26.30	25.75	26.34
1984	25.88	26.14		26.16	26.45	26.53	26.56	26.44	26.48	26.42	26.05	25.95	26.28
1985	26.03	26.14	26.26	26.34	26.44	26.46	26.53	26.52	26.48	26.40	26.28		26.35
1986	26.13	26.21	26.27	26.22	26.28	26.29	26.31	26.28	26.32	26.23	26.18	25.91	26.22
1987	25.99	26.26		26.48	26.58	26.58	26.54	26.45	26.40	26.30	26.14	26.00	26.34
1988		26.33		26.42	26.48	26.65	26.68	26.63	26.49	26.39	25.99	25.93	26.40
1989	26.14	26.11		26.57	26.60	26.61	26.63	26.62	26.43	26.38	26.16	25.91	26.38
1990	26.05	26.27	26.37	26.44	26.40	26.50	26.55	26.49	26.41	26.34		25.91	26.34
1991		25.98	26.09	26.25	26.45	26.42	26.46	26.39	26.19	26.34	26.24	25.93	26.25
1992	25.80	25.91	26.27	26.40	26.26	26.34	26.37	26.35	26.32	26.31	26.21	25.93	26.21
1993	26.16	26.29	26.29	26.30	26.40	26.52	26.44	26.46	26.46	26.41	26.26	25.83	26.32
1994	25.96	26.06		26.35	26.33	26.39	26.42	26.51	26.32	26.19	26.01	25.99	26.23
1995		26.23		26.29	26.27	26.38	26.43	26.46	26.31	26.34	26.31	25.96	26.30
1996	25.96	26.14	26.24	26.10	26.24	26.26	26.26	26.25	26.04	26.14	26.06	25.81	26.13
1997	26.02			26.18	26.32	26.44	26.45	26.45	26.39	26.41	26.22	25.87	26.28
1998	26.07		26.21	26.31	26.31	26.39	26.39	26.40	26.37	26.37	26.38	26.10	26.30
1999	26.22		26.32	26.39	26.34	26.38	26.34	26.31	26.24	26.13	26.13	25.96	26.25

MONTHLY AVERAGE 125 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									26.27	26.32			26.30
1950									26.60			26.27	26.44
1951						26.62							26.62
1957				26.44									26.44
1964			26.56	26.60	26.55	26.67		26.72	26.68	26.66	26.59		26.63
1965	26.41	26.36	26.41	26.50	26.46	26.51	26.60	26.59	26.52	26.54	26.51	26.57	26.50
1966		26.43	26.40	26.47	26.49	26.46	26.54	26.52	26.50	26.54	26.53	26.28	26.47
1967	26.20	26.24	26.46	26.36	26.52	26.51	26.53	26.49	26.42	26.44	26.49	26.17	26.40
1968	26.07	26.24	26.39	26.37	26.48	26.48	26.54	26.53	26.54	26.58	26.59	26.31	26.43
1969	26.35	26.38	26.41	26.21	26.35	26.42	26.42	26.45	26.52	26.51	26.36	26.43	26.40
1970	26.21	26.42	26.32	26.26	26.37	26.37	26.48	26.39		26.33	26.24		26.34
1971	26.19	26.36	26.44	26.40	26.34	26.37	26.41	26.35	26.29	26.18	26.42	26.00	26.31
1972	26.09	26.37	26.42	26.44	26.51	26.56	26.61	26.60	26.53	26.38	26.27		26.43
1973	26.30	26.38	26.45	26.50	26.52	26.57	26.63	26.65	26.56	26.60	26.58	26.24	26.50
1974	26.13	26.27	26.39	26.53	26.63	26.67	26.67	26.63	26.63	26.59	26.56		26.52
1975	26.23	26.39			26.35	26.42	26.50	26.58	26.69	26.35	26.37	26.10	26.40
1976	26.31	26.29	26.32	26.41	26.46	26.54	26.51	26.55	26.55	26.62	26.57	26.49	26.47
1977	26.49	26.45	26.42	26.49	26.61	26.60	26.63	26.55	26.49	26.72	26.60	26.27	26.53
1978	26.34	26.45	26.47	26.46	26.55	26.63	26.51	26.57	26.52		26.36		26.49
1979	26.54	26.58		26.60	26.52	26.64	26.63	26.60	26.65	26.72	26.64	26.34	26.59
1980	26.18		26.49	26.47	26.61	26.56	26.57	26.55	26.55				26.50
1981	26.49		26.16	26.39	26.50	26.52	26.44		26.40	26.33	26.33	26.38	26.39
1982	26.43	26.45	26.46	26.49	26.58	26.61	26.63		26.48	26.48	25.99		26.46
1983		26.13					26.60	26.56	26.60	26.45	26.50	26.07	26.42
1984	26.12	26.30		26.22	26.53	26.59	26.62	26.52	26.64	26.56	26.45	26.08	26.42
1985	26.14	26.27	26.33	26.41	26.51	26.57	26.58	26.56	26.54	26.45	26.50		26.44
1986	26.33	26.28	26.30	26.26	26.29	26.33	26.34	26.34	26.49	26.49	26.43	26.17	26.34
1987	26.09	26.38		26.56	26.63	26.62	26.62	26.55	26.57	26.48	26.33	26.29	26.47
1988		26.46		26.48	26.59	26.71	26.72	26.69	26.58	26.50	26.04	26.07	26.48
1989	26.22	26.28		26.62	26.67	26.71	26.68	26.72	26.60	26.62	26.52	26.21	26.53
1990	26.33	26.39	26.47	26.50	26.48	26.55	26.60	26.56	26.53	26.47		26.20	26.46
1991		26.00	26.16	26.30	26.49	26.49	26.51	26.46	26.34	26.42	26.35	26.19	26.34
1992	25.98	26.04	26.31	26.46	26.32	26.39	26.41	26.40	26.38	26.42	26.44	26.18	26.31
1993	26.26	26.36	26.35	26.38	26.47	26.60	26.53	26.56	26.52	26.53	26.49	25.96	26.42
1994	26.13	26.19		26.39	26.40	26.42	26.46	26.56	26.42	26.43	26.26	26.24	26.35
1995		26.30		26.41	26.39	26.48	26.49	26.52	26.43	26.46	26.44	26.17	26.41
1996	26.13	26.25	26.33	26.19	26.33	26.37	26.35	26.34	26.20	26.32	26.25	26.15	26.27
1997	26.24			26.25	26.42	26.51	26.51	26.49	26.48	26.51	26.39	26.10	26.39
1998	26.33		26.27	26.40	26.39	26.47	26.45	26.46	26.46	26.48	26.50	26.36	26.42
1999	26.34		26.47	26.48	26.44	26.45	26.40	26.37	26.35	26.31	26.32	26.11	26.37

MONTHLY AVERAGE 150 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							26.56	26.66	26.58	26.62	26.52	26.40	26.56
1947			26.25		26.48	26.49	26.43		26.37	26.51	26.58		26.44
1948				26.63	26.63	26.70	26.67	26.72					26.67
1949						26.57		26.69	26.71			26.63	26.65
1950			26.59	26.71		26.78	26.84	26.82	26.84		26.81	26.49	26.74
1951	26.44	26.42	26.34	26.46	26.58	26.72	26.76	26.60	26.76	26.57			26.57
1952	26.72			26.64	26.72	26.91	26.73	26.72	26.58	26.42		26.40	26.65
1953		26.43		26.82	26.81	26.74	26.71	26.57	26.45	26.62	26.63	26.40	26.62
1954	26.55	26.47	26.49	26.56	26.53	26.69	26.81	26.74	26.70	26.67	26.69	26.75	26.64
1955		26.60		26.54	26.57	26.60	26.74	26.69	26.73		26.67	26.51	26.63
1956	26.42	26.55	26.50		26.38	26.66	26.66	26.58	26.51	26.51	26.59	26.45	26.53
1957	26.56	26.50	26.47	26.55	26.71	26.66	26.63	26.72	26.64	26.76	26.68	26.61	26.62
1958	26.62	26.69	26.55	26.55	26.56	26.56	26.53	26.52	26.46	26.53	26.53	26.31	26.53
1959	26.47	26.45	26.57	26.56	26.57	26.56	26.55	26.53	26.59	26.60	26.56	26.44	26.54
1960	26.29	26.22	26.35	26.46	26.41	26.41	26.48	26.41	26.66	26.51	26.51	26.38	26.42
1961	26.32	26.27	26.30		26.61	26.65	26.61	26.57	26.52	26.62	26.58		26.51
1962	26.66	26.50	26.34		26.65	26.69	26.69	26.68	26.56	26.76	26.76		26.63
1963	26.46	26.61	26.46	26.46	26.65	26.68	26.62	26.56	26.57	26.60	26.65	26.47	26.57
1964		26.54	26.63	26.68	26.60	26.72	26.70	26.75	26.70	26.73	26.84	26.84	26.70
1965	26.57	26.39	26.60	26.57	26.53	26.55	26.63	26.65	26.61	26.64	26.66	26.62	26.59
1966		26.60	26.54	26.54	26.57	26.61	26.69	26.67	26.78	26.70	26.71	26.51	26.63
1967	26.49	26.67	26.63	26.45	26.57	26.61	26.58	26.58	26.52	26.66	26.68	26.55	26.58
1968	26.35	26.42	26.47	26.49	26.61	26.61	26.64	26.63	26.70	26.72	26.78	26.75	26.60
1969	26.71	26.43	26.54	26.51	26.51	26.49	26.54	26.60	26.68	26.67	26.49	26.55	26.56
1970	26.36	26.55	26.44	26.35	26.50	26.48	26.65	26.50		26.44	26.38	26.12	26.43
1971	26.34	26.48	26.55	26.44	26.40	26.46	26.53	26.44	26.52	26.36	26.56	26.40	26.46
1972	26.41	26.57	26.52	26.52	26.53	26.58	26.68	26.67	26.62	26.55	26.57		26.57
1973	26.30	26.45	26.55	26.58	26.59	26.63	26.68	26.68	26.62	26.72	26.67	26.37	26.57
1974	26.20	26.35	26.46	26.54	26.66	26.70	26.74	26.67	26.70	26.68	26.68		26.58
1975	26.30	26.60			26.41	26.54	26.63	26.72	26.83	26.52	26.64	26.57	26.58
1976	26.56	26.40	26.40	26.47	26.54	26.68	26.63	26.60	26.66	26.68		26.63	26.57
1977	26.64	26.57	26.56	26.55	26.69	26.67		26.47	26.57	26.66	26.68	26.56	26.60
1978	26.60	26.50		26.51	26.62	26.69	26.52	26.67	26.66	26.81	26.60		26.62
1979	26.60	26.59	26.67	26.73	26.63	26.68	26.76	26.70	26.74	26.85	26.79	26.73	26.71
1980	26.82		26.65	26.62	26.64		26.64	26.68	26.64				26.67
1981	26.71		26.48	26.55	26.66	26.65	26.53		26.63	26.53	26.55	26.73	26.60
1982	26.70	26.62	26.53	26.58	26.65	26.68	26.72		26.64	26.61	26.40		26.61
1983		26.24		26.55	26.52	26.60	26.66		26.72	26.62	26.63	26.39	26.55
1984	26.35	26.40		26.43	26.59	26.67	26.62	26.69	26.69	26.68	26.61	26.38	26.56
1985	26.41	26.42	26.40	26.47	26.61	26.63	26.65	26.62	26.64	26.62	26.63		26.55
1986	26.49	26.43	26.36	26.34	26.35	26.41	26.38	26.43	26.64	26.75	26.48	26.53	26.47
1987	26.50	26.55		26.64	26.73	26.69	26.74	26.64	26.64	26.67	26.65	26.78	26.66
1988		26.56		26.59	26.68	26.81	26.81	26.81	26.70	26.70	26.26	26.35	26.63
1989	26.35	26.34		26.70	26.76	26.81	26.79	26.81	26.75	26.74	26.66	26.50	26.66
1990	26.58	26.57	26.52	26.55	26.54	26.61	26.67	26.63	26.63	26.54		26.57	26.58
1991		26.12	26.19	26.51	26.57	26.56	26.58	26.52	26.42	26.51	26.48	26.35	26.44
1992	26.10	26.16	26.32	26.52	26.42	26.46	26.48	26.46	26.47	26.61	26.54	26.60	26.43
1993	26.44	26.54	26.43	26.48	26.59	26.66	26.63	26.64	26.60	26.63	26.60	26.39	26.55
1994	26.33	26.34		26.44	26.45	26.46	26.51	26.65	26.51	26.63	26.50	26.42	26.48
1995		26.40		26.50	26.53	26.55	26.56	26.61	26.52	26.57	26.54	26.44	26.52
1996	26.33	26.36	26.42	26.36	26.43	26.46	26.47	26.46	26.40	26.52	26.38	26.32	26.41
1997	26.37			26.35	26.52	26.60	26.59	26.54	26.59	26.60	26.54	26.44	26.51
1998	26.57		26.39	26.47	26.46	26.57	26.53	26.51	26.56	26.67	26.67	26.49	26.54
1999	26.41		26.60	26.58	26.54	26.54	26.48	26.49	26.50	26.46	26.54	26.34	26.50

MONTHLY AVERAGE 175 METER SIGMA-t

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												26.51	26.51
1947						26.54	26.48		26.61	27.00	26.97		26.72
1948				26.64	26.64	26.72	26.82	26.97					26.76
1949						26.79		26.85	26.80				26.81
1950			26.61	26.70			26.91	26.90	26.88		26.85	26.82	26.81
1951		26.49	26.52	26.63	26.66	26.80	26.77	26.72	26.89	26.80			26.70
1952	26.81			26.74	26.87	26.96	26.84	26.85	26.84	26.74		26.55	26.80
1953		26.40		26.83	26.78	26.82	26.87	26.71	26.73	26.82	26.83	26.71	26.75
1954	26.71	26.59	26.60		26.68	26.82	26.89	26.81	26.86	26.89	26.87	26.88	26.78
1955	26.78	26.72		26.64	26.72	26.67	26.76	26.74		26.78	26.85	26.66	26.73
1956	26.73	26.77	26.58		26.56	26.72	26.72	26.67	26.79	26.78	26.65	26.71	26.70
1957		26.59	26.52		26.79	26.82	26.79	26.84	26.68	26.87	26.84	26.79	26.75
1958	26.75	26.78	26.67	26.64	26.72	26.71	26.61	26.59	26.65	26.80	26.74		26.70
1959	26.74	26.52	26.58	26.62	26.60	26.56	26.59	26.60	26.68	26.71	26.61	26.56	26.61
1960	26.54	26.56	26.44	26.51	26.62	26.58	26.68	26.57	26.78	26.69	26.80	26.64	26.62
1961	26.48	26.36	26.44		26.68	26.69	26.71	26.64	26.67	26.68	26.69		26.60
1962	26.68	26.58	26.45		26.74	26.80	26.79	26.75	26.68	26.94	26.86		26.73
1963	26.77	26.71	26.64	26.58	26.70	26.74	26.70	26.67	26.70	26.68	26.73	26.51	26.68
1964		26.60	26.68	26.71	26.68	26.80	26.81	26.81	26.79	26.83	26.90	26.84	26.77
1965	26.62	26.52	26.72	26.67	26.61	26.69	26.75	26.73	26.69	26.86	26.77	26.67	26.69
1966		26.63	26.73	26.72	26.68	26.78	26.82	26.81	26.92	26.96	26.95	26.78	26.80
1967	26.81	26.66	26.64	26.49	26.64	26.65	26.67	26.66	26.68	26.83	26.81	26.63	26.68
1968	26.48	26.67	26.60	26.66	26.76	26.62	26.76	26.77	26.82	26.86	26.85	26.79	26.72
1969	26.82	26.56	26.57	26.56	26.60	26.61	26.58	26.70	26.83	26.83	26.76	26.74	26.68
1970	26.80	26.78	26.61	26.50	26.58	26.58	26.72	26.58		26.66	26.65	26.45	26.63
1971	26.44	26.58	26.69	26.56	26.50	26.54	26.58	26.55	26.62	26.55	26.74	26.65	26.58
1972	26.65	26.67	26.60	26.54	26.64	26.66	26.69	26.72	26.70	26.66	26.72		26.66
1973	26.62	26.52	26.63	26.60	26.63	26.68	26.76	26.77	26.76	26.82	26.88	26.58	26.69
1974	26.34	26.52	26.56	26.62	26.67	26.82	26.79	26.79	26.79	26.79	26.83		26.68
1975	26.54	26.65			26.45	26.55	26.72	26.77	26.86	26.63	26.75	26.73	26.67
1976	26.71	26.56	26.51	26.71	26.65	26.70	26.77	26.67	26.67	26.74	27.05	26.86	26.72
1977	26.75	26.67	26.58	26.64	26.76	26.73	26.73	26.64	26.66	26.69	26.71	26.63	26.68
1978	26.68	26.67		26.58	26.74	26.74	26.58		26.74		26.72		26.68
1979	26.77	26.71	26.84	26.84	26.81	26.91	26.81	26.83	26.88	26.98	26.92	26.74	26.84
1980	26.72		26.82	26.70	26.71	26.73	26.73	26.82	26.93				26.77
1981	26.73		26.67	26.69	26.69	26.61	26.69		26.74	26.72	26.88	26.86	26.73
1982	26.83	26.66	26.71	26.75	26.75	26.73	26.76		26.88	26.66	26.65		26.74
1983		26.42		26.55		26.69	26.72	26.70	26.73	26.70	26.66	26.52	26.63
1984	26.54	26.45		26.54	26.66	26.70	26.81	26.76	26.78	26.73	26.66	26.51	26.65
1985	26.50	26.54	26.49	26.48	26.66	26.67	26.68	26.65	26.70	26.69	26.65		26.61
1986	26.69	26.53	26.45	26.36	26.41	26.43	26.47	26.66	26.73		26.61		26.53
1987	26.52	26.58		26.67	26.76	26.76	26.77	26.78	26.71	26.83	26.84		26.72
1988				26.64	26.74	26.82	26.84	26.85	26.77	26.76		26.64	26.76
1989		26.54		26.74	26.78	26.82	26.85	26.82	26.80	26.78	26.70	26.59	26.74
1990	26.69	26.65	26.57	26.59	26.58	26.67	26.72	26.72	26.74	26.68		26.63	26.66
1991		26.24	26.27	26.61	26.67	26.62	26.64	26.58	26.57	26.62	26.61	26.40	26.53
1992	26.30	26.34	26.44	26.56	26.52	26.53	26.60	26.67	26.59	26.74	26.96	26.74	26.58
1993	26.75	26.69	26.54	26.60	26.64	26.73	26.71	26.73	26.68	26.66	26.65	26.65	26.67
1994	26.57	26.45		26.48	26.52	26.49	26.56	26.77	26.61	26.76	26.76	26.65	26.60
1995		26.60		26.63	26.57	26.62	26.62	26.67	26.63	26.73	26.76	26.57	26.64
1996	26.52	26.54	26.52	26.45	26.51	26.55	26.57	26.58	26.58	26.59	26.54	26.46	26.53
1997	26.55			26.48	26.60	26.68	26.64	26.62	26.71	26.80	26.72	26.59	26.64
1998	26.75		26.46	26.57	26.57	26.71	26.65	26.60	26.70	26.79	26.80	26.68	26.66
1999	26.63		26.66		26.70	26.68	26.63	26.55	26.55	26.59	26.71	26.53	26.62

Appendix C-2. Monthly statistical summaries for density at standard depths.

MONTHLY STATISTICAL SUMMARY FOR SURFACE SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	43	25.66	0.16	0.02	25.04	25.91	-1.46	4.46
FEB	40	25.86	0.29	0.05	24.42	26.22	-3.37	16.67
MAR	37	26.00	0.19	0.03	25.56	26.32	-0.63	-0.04
APR	48	25.87	0.27	0.04	25.23	26.30	-0.68	-0.05
MAY	50	25.65	0.29	0.04	24.83	26.11	-0.97	0.84
JUN	53	25.20	0.27	0.04	24.50	25.70	-0.41	-0.27
JUL	53	24.34	0.34	0.05	23.25	25.06	-0.86	1.13
AUG	47	23.56	0.44	0.07	22.39	24.18	-0.80	0.32
SEP	50	23.58	0.35	0.05	22.61	24.16	-0.60	0.10
OCT	49	24.07	0.28	0.04	23.37	24.56	-0.36	-0.37
NOV	47	24.73	0.25	0.04	24.00	25.25	-0.73	1.19
DEC	43	25.33	0.17	0.03	24.81	25.60	-0.82	1.37

MONTHLY STATISTICAL SUMMARY FOR 10 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	37	25.67	0.15	0.02	25.22	25.88	-0.97	1.51
FEB	35	25.91	0.19	0.03	25.25	26.20	-1.47	3.50
MAR	32	26.03	0.15	0.03	25.62	26.40	-0.23	1.50
APR	37	25.95	0.21	0.03	25.39	26.30	-0.54	0.78
MAY	40	25.72	0.28	0.05	25.03	26.17	-0.72	0.24
JUN	41	25.28	0.27	0.04	24.65	25.72	-0.43	-0.56
JUL	41	24.51	0.34	0.05	23.69	25.20	-0.17	-0.02
AUG	39	23.71	0.39	0.06	22.75	24.32	-0.44	-0.13
SEP	39	23.56	0.34	0.05	22.70	24.15	-0.63	0.43
OCT	40	24.05	0.28	0.04	23.35	24.52	-0.33	-0.21
NOV	39	24.74	0.25	0.04	24.10	25.22	-0.52	0.78
DEC	33	25.32	0.17	0.03	24.85	25.61	-0.66	0.62

MONTHLY STATISTICAL SUMMARY FOR 20 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	36	25.70	0.15	0.03	25.32	25.99	-0.53	0.44
FEB	36	25.93	0.16	0.03	25.41	26.24	-1.03	2.28
MAR	32	26.06	0.14	0.02	25.68	26.37	-0.31	1.17
APR	39	26.01	0.18	0.03	25.55	26.33	-0.32	0.18
MAY	41	25.83	0.21	0.03	25.27	26.25	-0.44	0.26
JUN	42	25.52	0.22	0.03	24.94	25.94	-0.54	0.60
JUL	41	25.13	0.35	0.06	24.41	25.99	-0.03	-0.51
AUG	40	24.54	0.46	0.07	23.72	25.42	0.29	-0.63
SEP	40	23.85	0.38	0.06	23.00	25.03	0.79	1.66
OCT	42	24.14	0.27	0.04	23.42	24.72	-0.15	0.49
NOV	38	24.79	0.25	0.04	24.12	25.22	-0.70	0.90
DEC	33	25.34	0.16	0.03	24.95	25.65	-0.30	-0.20

MONTHLY STATISTICAL SUMMARY FOR 30 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	25.73	0.14	0.02	25.33	25.96	-0.66	0.51
FEB	41	25.93	0.16	0.03	25.42	26.25	-0.72	1.55
MAR	39	26.07	0.16	0.03	25.74	26.37	-0.31	-0.27
APR	46	26.05	0.17	0.03	25.62	26.40	-0.17	-0.48
MAY	50	25.94	0.18	0.03	25.59	26.32	-0.06	-0.45
JUN	54	25.79	0.23	0.03	25.27	26.27	0.10	-0.15
JUL	53	25.64	0.35	0.05	24.76	26.32	-0.63	-0.20
AUG	50	25.41	0.45	0.06	23.86	26.06	-1.25	2.05
SEP	46	24.52	0.43	0.06	23.69	25.58	0.50	0.36
OCT	49	24.35	0.32	0.05	23.72	24.98	0.15	-0.29
NOV	48	24.90	0.27	0.04	24.18	25.49	-0.56	0.94
DEC	43	25.40	0.16	0.02	25.00	25.76	-0.26	0.29

MONTHLY STATISTICAL SUMMARY FOR 50 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	25.80	0.14	0.02	25.46	26.05	-0.51	-0.19
FEB	41	26.01	0.14	0.02	25.64	26.34	-0.35	0.70
MAR	38	26.11	0.13	0.02	25.86	26.39	-0.09	-0.64
APR	48	26.15	0.16	0.02	25.82	26.48	0.01	-0.75
MAY	51	26.15	0.14	0.02	25.87	26.47	0.22	-0.24
JUN	54	26.20	0.14	0.02	25.96	26.46	0.03	-1.01
JUL	53	26.20	0.17	0.02	25.75	26.55	-0.38	0.15
AUG	51	26.12	0.16	0.02	25.67	26.43	-0.56	0.13
SEP	49	25.67	0.33	0.05	24.65	26.38	-0.52	1.04
OCT	47	25.15	0.43	0.06	24.23	25.96	-0.25	-0.47
NOV	48	25.21	0.27	0.04	24.53	25.76	-0.54	0.44
DEC	43	25.52	0.17	0.03	25.12	25.83	-0.27	-0.58

MONTHLY STATISTICAL SUMMARY FOR 75 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	44	25.92	0.16	0.02	25.53	26.18	-0.51	-0.31
FEB	43	26.09	0.12	0.02	25.75	26.38	-0.09	1.14
MAR	39	26.19	0.11	0.02	26.01	26.44	0.12	-0.19
APR	47	26.24	0.14	0.02	25.95	26.54	0.06	-0.76
MAY	51	26.30	0.11	0.02	26.08	26.55	0.19	-0.47
JUN	53	26.36	0.12	0.02	26.08	26.63	-0.23	-0.54
JUL	51	26.39	0.13	0.02	26.10	26.69	-0.04	-0.13
AUG	50	26.36	0.12	0.02	26.04	26.66	-0.09	0.21
SEP	49	26.19	0.16	0.02	25.74	26.50	-0.70	0.58
OCT	48	25.99	0.22	0.03	25.25	26.38	-1.15	2.35
NOV	46	25.77	0.22	0.03	24.96	26.16	-1.10	2.88
DEC	42	25.74	0.16	0.03	25.46	26.08	0.07	-0.47

MONTHLY STATISTICAL SUMMARY FOR 100 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	43	26.08	0.14	0.02	25.80	26.38	0.05	-0.84
FEB	43	26.20	0.12	0.02	25.91	26.48	0.16	0.58
MAR	38	26.27	0.10	0.02	26.10	26.47	0.18	-0.47
APR	48	26.35	0.12	0.02	26.10	26.65	0.06	-0.01
MAY	50	26.40	0.10	0.01	26.24	26.62	0.28	-0.50
JUN	53	26.47	0.12	0.02	26.23	26.90	0.56	2.08
JUL	52	26.49	0.12	0.02	26.26	26.76	0.18	-0.41
AUG	50	26.47	0.11	0.02	26.25	26.72	0.05	-0.34
SEP	50	26.39	0.12	0.02	26.04	26.64	-0.42	0.77
OCT	48	26.32	0.12	0.02	26.07	26.62	0.12	-0.03
NOV	46	26.18	0.13	0.02	25.93	26.48	0.16	-0.52
DEC	43	25.99	0.14	0.02	25.68	26.39	0.39	0.70

MONTHLY STATISTICAL SUMMARY FOR 125 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	31	26.25	0.15	0.03	25.97	26.54	0.13	-0.42
FEB	30	26.32	0.12	0.02	26.00	26.58	-0.75	1.05
MAR	26	26.38	0.10	0.02	26.16	26.56	-0.72	0.56
APR	35	26.42	0.11	0.02	26.19	26.62	-0.37	-0.32
MAY	35	26.48	0.10	0.02	26.30	26.67	-0.08	-0.78
JUN	36	26.53	0.10	0.02	26.33	26.71	-0.09	-0.76
JUL	35	26.54	0.10	0.02	26.34	26.72	-0.21	-0.64
AUG	34	26.53	0.10	0.02	26.34	26.72	-0.21	-0.17
SEP	37	26.50	0.11	0.02	26.20	26.69	-0.73	0.33
OCT	35	26.48	0.12	0.02	26.18	26.72	-0.12	0.13
NOV	34	26.42	0.15	0.03	25.99	26.64	-1.04	1.26
DEC	29	26.22	0.14	0.03	25.96	26.57	0.53	0.28

MONTHLY STATISTICAL SUMMARY FOR 150 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	42	26.47	0.16	0.03	26.10	26.82	0.04	-0.43
FEB	43	26.46	0.13	0.02	26.12	26.69	-0.66	0.16
MAR	38	26.48	0.11	0.02	26.19	26.67	-0.46	-0.26
APR	47	26.53	0.10	0.02	26.34	26.82	0.39	0.71
MAY	51	26.57	0.10	0.01	26.35	26.81	-0.06	-0.15
JUN	52	26.62	0.11	0.02	26.41	26.91	0.10	0.27
JUL	52	26.63	0.10	0.01	26.38	26.84	-0.13	-0.39
AUG	50	26.62	0.10	0.01	26.41	26.83	-0.19	-0.49
SEP	52	26.62	0.11	0.02	26.37	26.84	-0.21	-0.24
OCT	49	26.62	0.10	0.02	26.36	26.85	-0.20	0.04
NOV	47	26.60	0.12	0.02	26.26	26.84	-0.44	0.78
DEC	43	26.50	0.15	0.02	26.12	26.84	0.29	0.17

MONTHLY STATISTICAL SUMMARY FOR 175 METER SIGMA-t

MONTH	NO. OBS.	MEAN	STANDARD DEVIATION	STANDARD ERROR	MINIMUM	MAXIMUM	SKEWNESS	KURTOSIS
JAN	39	26.65	0.14	0.02	26.30	26.84	-0.76	-0.05
FEB	42	26.58	0.12	0.02	26.24	26.78	-0.59	0.51
MAR	37	26.58	0.12	0.02	26.27	26.84	-0.14	0.81
APR	44	26.61	0.10	0.02	26.36	26.84	-0.03	0.25
MAY	49	26.66	0.10	0.01	26.41	26.87	-0.40	0.17
JUN	52	26.69	0.11	0.02	26.43	26.96	-0.08	0.09
JUL	52	26.71	0.10	0.01	26.48	26.91	-0.36	-0.31
AUG	49	26.72	0.10	0.01	26.55	26.97	0.18	-0.52
SEP	50	26.74	0.10	0.01	26.55	26.93	0.16	-0.66
OCT	47	26.76	0.10	0.02	26.55	27.00	0.30	-0.06
NOV	46	26.77	0.11	0.02	26.54	27.05	0.27	-0.34
DEC	39	26.65	0.12	0.02	26.40	26.88	0.03	-0.65

Appendix C-3. Monthly average density anomalies by year at standard depths.

MONTHLY AVERAGE SURFACE SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.21	0.13	-0.38	-0.30	0.03	0.22	0.14	0.01
1947			0.10		0.13	0.12	-0.04		0.34	0.34			0.17
1948				0.17	0.01	-0.07	0.06						0.04
1949						0.11		-0.04	0.41			0.28	0.19
1950			-0.02	-0.29		0.25	0.10	0.10	0.22		0.12	-0.11	0.05
1951	-0.01	-0.11	-0.38	-0.65	-0.52	-0.55	-0.41	0.51	0.40	0.04			-0.17
1952	-0.06			-0.20	-0.11	-0.07	-0.18	-1.12	-0.36	-0.29		-0.05	-0.27
1953		-0.17		-0.70	-0.36		-0.30	0.45	0.39	0.29	0.10	0.21	-0.01
1954	0.16	-0.09	-0.26	-0.03	0.27	0.30	0.00	0.42	0.61	0.46	0.39	0.24	0.21
1955	0.11	0.08		-0.18	-0.11	0.03	0.25	0.28	0.45	0.54	0.09	0.11	0.15
1956	-0.12	-0.17	-0.10	-0.06	0.08	0.03	0.24	0.58	0.51	0.36	0.17	0.02	0.13
1957	0.08	0.19	0.12	-0.02	-0.16	-0.22	-0.52	0.27		0.00	-0.31	0.03	-0.05
1958	-0.15	-0.30	-0.35	-0.34	-0.14	-0.11	-0.20	0.17	0.20	0.19	0.04	0.15	-0.07
1959	0.14	0.28	0.27	0.30	0.20	0.25	0.03	-0.21	0.05	0.09	0.05	-0.06	0.12
1960	-0.06		-0.21	-0.10	-0.15	-0.25	0.09	-0.23	-0.29	0.10	0.06	0.09	-0.09
1961	0.01		0.01			-0.22	-0.14	-0.15	0.26	-0.23	-0.15		-0.08
1962	-0.06	0.09	-0.11		0.02	0.15	-0.09	0.26	0.48	0.05	-0.29		0.05
1963	-0.17	0.02	0.13	0.17	0.18	0.21	0.06	0.39	0.39	0.15	-0.04	0.12	0.13
1964	-0.10	0.13	0.22	0.24	0.26	0.08	0.67	0.48	0.21	0.27	0.28	0.17	0.24
1965		0.21	-0.04	-0.07	0.14	-0.24	0.06	0.54	0.56	0.47	0.43	0.33	0.22
1966		0.06	-0.04	-0.13	-0.06	0.01	0.22	0.55	0.52	0.52	0.28	-0.12	0.16
1967	-0.31	-0.11	0.00	-0.09	-0.17	-0.02	-0.14	-0.22	0.10	0.01	0.01	0.18	-0.06
1968	0.17	0.00	-0.04	-0.06	0.10	0.23	0.28	0.46	0.23	0.03	-0.01	0.00	0.12
1969	0.08	-0.20	-0.21	-0.13	-0.06	-0.15	0.30	0.45	0.22	0.24	0.12	-0.17	0.04
1970	-0.16	-0.34	-0.49	-0.29	-0.38	-0.50	-0.52	-0.73		-0.33	-0.65	-0.40	-0.44
1971	-0.05	-0.33	-0.30	-0.19	-0.18	-0.33	-0.35	-0.53	-0.17	0.03	0.02	0.03	-0.20
1972	-0.01	0.12	0.13	0.22	0.22	0.21	0.23	-0.09	0.00	-0.08	0.16		0.10
1973	0.08	0.00	-0.01	-0.42	-0.79	-0.50	-0.50	-0.08	0.04	-0.07	0.20	0.05	-0.17
1974	0.03	0.09	0.11	0.22	0.36	0.07	0.01	-0.45	-0.94	-0.65	-0.33		-0.13
1975	-0.05				0.15	0.46	-0.12	-0.28	-0.21	0.06	0.15	0.14	0.03
1976	0.04	-0.07	0.07	0.10	0.12	0.35	0.36		0.02	0.26	0.52	0.32	0.19
1977	0.25	0.30	0.17	0.08	0.15	-0.12	-0.03	-0.16	-0.15	-0.21	-0.15	0.10	0.02
1978	-0.06	0.02		-0.10	0.07	0.43	0.12		0.22	0.38	0.34		0.16
1979	0.12	0.04	0.03	0.14	0.00	-0.14	-0.10	-0.30	0.11	0.30	0.08	0.04	0.03
1980	0.11		0.00	-0.03	0.04	0.02	0.19	0.14	0.47				0.12
1981	0.04		0.01	-0.12	-0.14	-0.11	-0.18		-0.13		-0.09	-0.01	-0.08
1982	0.10	0.21	0.22	0.19	0.19	0.21	0.40		-0.01	0.03	-0.24		0.13
1983		-0.10		-0.70	-0.69	-0.38	-0.60		-0.33	-0.34	-0.30	-0.24	-0.41
1984	-0.24	-0.17		-0.51	-0.69	-0.44	-1.14	-0.88	-0.60	-0.51	-0.25	-0.21	-0.51
1985	-0.01	-0.04	0.05	0.10	0.16	0.27	0.30	-0.11	-0.31	-0.34	-0.06		0.00
1986	-0.02	0.04	-0.05	-0.04	-0.06	-0.06	-0.01	0.04		0.29	0.14	0.26	0.05
1987	0.23	0.05		-0.45	-0.26	-0.05	-0.24	0.11	0.55	0.22	0.13	0.17	0.04
1988		0.15		0.06	0.00	0.05	0.19	0.12	-0.06	-0.18	0.08	-0.05	0.04
1989	-0.04	-0.06		0.21	0.37	0.30	0.19	0.26	-0.01	0.37	0.33	0.30	0.20
1990	0.14	0.20	0.11	0.17	0.38	0.29	0.19	0.26	0.09	-0.32		0.23	0.16
1991		0.03	-0.07	-0.31	-0.34	-0.44	-0.56	0.15	0.14	-0.52	-0.71	-0.48	-0.28
1992	-0.64	-1.44		0.07	0.09	-0.02	-0.11	-0.03	0.06	0.10	-0.01	-0.07	-0.18
1993	-0.04	-0.12	-0.39	-0.37	-0.07	-0.04	0.04	0.02	0.44	0.31	0.09	0.03	-0.01
1994	0.02	0.00		0.03	-0.03	0.03	-0.26	-1.19	-0.74	0.01	-0.10	-0.06	-0.21
1995		-0.22		-0.65	-0.91	-0.76	-0.53	-0.51	-0.24	-0.20	0.10	0.07	-0.39
1996	-0.06	-0.21	-0.18	-0.12	0.01	0.09	0.26	0.10	-0.23	-0.08	-0.12	-0.11	-0.05
1997	-0.14			0.31	-0.22	0.27	-0.16	-0.12	0.00	-0.25	-0.18	-0.02	-0.05
1998	-0.12		-0.19	-0.24	-0.47	-0.53	-0.58	-0.43	0.23	0.08	0.02	0.12	-0.19
1999	0.07		-0.13	-0.33	-0.29	-0.32	-0.94	-0.78	-0.41	-0.08	0.02	0.07	-0.28

MONTHLY AVERAGE 10 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.37							0.37
1959	0.11	0.29	0.37	0.29	0.21	0.22	-0.03	-0.26	0.04	0.12	0.14	-0.03	0.12
1960	-0.07		-0.15	-0.09	-0.18	-0.25	0.00	0.03	-0.34	0.08	0.08	0.11	-0.07
1961	0.02	0.08	0.03			-0.30	-0.21	-0.10	0.29	-0.14	-0.15		-0.05
1962	-0.06	0.10	-0.04		0.00	0.09	-0.12	0.23	0.38	0.13	-0.18		0.05
1963	-0.16	0.01	0.14	0.14	0.10	0.10	0.04	0.32	0.37	0.19	-0.03	0.07	0.11
1964	-0.11	0.06	0.20	0.23	0.31	0.09	0.53	0.51	0.23	0.30	0.31	0.14	0.23
1965	0.05	0.11	-0.05	-0.03	0.03	-0.27	0.01	0.38		0.47	0.46	0.31	0.13
1966		0.15	-0.02	-0.14	0.01	0.04	0.08	0.42	0.49	0.50	0.19	-0.13	0.14
1967	-0.38	-0.19	0.04	-0.05	-0.16	-0.04	-0.25	-0.35	0.04	-0.05	0.00	0.21	-0.10
1968	0.14	-0.02	-0.05	-0.10	0.04	0.21	0.20	0.36	0.21	0.02	-0.03	0.01	0.08
1969	0.14	-0.04	-0.16	-0.15	-0.08	-0.16	0.18	0.23	0.18	0.28	0.16	-0.15	0.04
1970	-0.16	-0.35	-0.42	-0.30	-0.40	-0.55	-0.41	-0.72		-0.25	-0.65	-0.34	-0.41
1971	-0.04	-0.32	-0.25	-0.18	-0.22	-0.36	-0.35	-0.64	-0.31	-0.03	0.07	0.05	-0.22
1972	0.00	0.11	0.17	0.25	0.18	0.17	0.14	-0.24	-0.02	-0.10	0.15		0.07
1973	0.05	0.03	0.06	-0.13	-0.76	-0.45	-0.64	-0.27	-0.11	-0.04	0.21	0.12	-0.16
1974	0.04	0.07	0.13	0.25	0.29	0.01	-0.10	-0.44	-0.92	-0.67	-0.40		-0.16
1975	-0.08	0.12			0.13	0.39	-0.08	-0.35	-0.06	0.09	0.18	0.16	0.05
1976	0.04	0.02	0.03	0.14	0.15	0.29	0.63	0.39	0.04	0.22	0.47	0.23	0.22
1977	0.15	0.21	0.04	0.05	0.13	-0.16	0.17	-0.11	-0.19	-0.18	-0.14	0.10	0.01
1978	-0.01	0.01	-0.06	-0.08	-0.09	0.35	0.10	-0.35	0.12	0.42	0.46		0.08
1979	0.11	0.10	0.08		0.11	0.05	-0.03	-0.33	0.01	0.31	0.06	0.03	0.05
1980	0.07		-0.04	-0.05	-0.02		0.12	0.47	0.45				0.14
1981	-0.10		-0.07	-0.15	-0.21	-0.13	-0.24		-0.08	0.00	-0.12	-0.15	-0.13
1982	0.08	0.19	0.23	0.20	0.13	0.12	0.40		-0.02	-0.02	-0.26		0.11
1983		0.02		-0.59	-0.74	-0.45	-0.51	-0.20	-0.30	-0.30	-0.31	-0.22	-0.36
1984	-0.17	-0.17		-0.24	-0.41	-0.20	-0.61	-0.12	-0.58	-0.51	-0.25	-0.18	-0.31
1985	-0.02	-0.04	0.07	0.09	0.22	0.30	0.34	-0.14	-0.35	-0.34	-0.02		0.01
1986	-0.01	0.08	0.03	-0.05	-0.10	-0.14	-0.17	-0.02	0.26	0.29	0.12	0.26	0.05
1987	0.22	0.05		-0.20	-0.22	-0.02	-0.16	0.06	0.50	0.23	0.11	0.16	0.07
1988		0.13		0.04	-0.01	0.07	0.60	0.47	-0.09	-0.17	0.10	-0.04	0.11
1989	-0.05	-0.03		0.19	0.36	0.26	0.02	0.14	-0.05	0.46	0.31	0.30	0.17
1990	0.15	0.22	0.14	0.15	0.34	0.25	0.10	0.29	0.10	-0.40		0.22	0.14
1991		0.02	-0.06	-0.31	-0.38	-0.41	-0.50	0.05	0.12	-0.43	-0.62	-0.45	-0.27
1992	-0.47	-0.67	0.04	0.01	0.03	0.06	-0.07	-0.21	0.06	0.16	-0.07	-0.07	-0.10
1993	-0.04	-0.12	-0.09	-0.21	-0.26	-0.06	0.10	0.01	0.60	0.31	0.09	0.04	0.03
1994	0.02	-0.03		-0.02	-0.02	0.03	-0.36	-1.04	-0.81	0.02	-0.10	-0.05	-0.21
1995		-0.21		-0.58	-0.68	-0.69	-0.58	-0.68	-0.24	-0.13	0.11	0.02	-0.37
1996	-0.05	-0.21	-0.16	-0.15	-0.05	0.00	0.14	0.05	-0.27	-0.06	-0.12	-0.10	-0.08
1997	-0.14			-0.11	-0.24	-0.11	-0.19	-0.25	-0.06	-0.22	-0.19	-0.02	-0.15
1998	-0.13		-0.16	-0.20	-0.49	-0.50	-0.58	-0.43	0.32	0.10	0.01	0.11	-0.18
1999	0.07		-0.07	-0.24	-0.32	-0.34	-0.90	-0.92	-0.45	-0.08	0.02	0.08	-0.29

MONTHLY AVERAGE 20 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1952										-0.18			-0.18
1954		-0.03		-0.13									-0.08
1955					-0.12			-0.01					-0.07
1956										0.28			0.28
1957		0.15		0.07		-0.31							-0.03
1958									-0.08				-0.08
1959	0.22	0.28	0.32	0.27	0.12	0.03	0.00	-0.23	-0.24	0.10	0.11	-0.02	0.08
1960	-0.03		-0.12	-0.14	-0.21	-0.31	0.20	-0.18	-0.57	0.09		0.12	-0.12
1961	0.06	0.06	0.04			0.03	-0.12	0.19	0.13	-0.06	-0.21		0.01
1962	-0.05	0.07	0.03		-0.07	-0.05	0.09	0.74	0.21	0.19	-0.16		0.10
1963	-0.05	0.01	0.14	0.12	0.10	0.06	-0.54	-0.17	0.18	0.18	-0.08	0.07	0.00
1964	-0.09	0.07	0.20	0.21	0.14	0.29	0.28	0.11	0.15	0.33	0.37	0.17	0.19
1965	0.05	0.07	-0.03	-0.06	-0.02	-0.26	0.04	0.59	1.09	0.52	0.34	0.30	0.22
1966		0.09	0.03	-0.15	0.04	-0.07	0.25	0.66	0.33	0.56	0.13	-0.13	0.16
1967	-0.35	-0.19	-0.03	0.00	0.01	-0.06	0.09	0.20	-0.08	-0.04	0.02	0.20	-0.02
1968	0.15	-0.07	-0.05	-0.10	-0.03	0.11	-0.35	0.00	0.02	0.05	-0.02	-0.01	-0.03
1969	0.15	-0.09	-0.14	-0.17	-0.17	-0.03	0.06	-0.36	-0.14	0.27	0.14	-0.15	-0.05
1970	-0.18	-0.28	-0.37	-0.31	-0.36	-0.61	-0.69	-0.70		-0.22	-0.66	-0.30	-0.43
1971	0.00	-0.31	-0.20	-0.18	-0.28	-0.31	-0.33	-0.65	-0.52	-0.08	0.01	0.05	-0.23
1972	0.02	0.06	0.17	0.20	0.14	0.13	-0.19	-0.75	-0.22	-0.11	0.10		-0.04
1973	0.14	0.01	0.07	0.00	-0.38	0.09	-0.05	-0.36	-0.37	-0.04	0.16	0.09	-0.05
1974	0.03	0.04	0.13	0.22	0.21	-0.17	-0.36	-0.04	-0.44	-0.64	-0.40		-0.13
1975	-0.05	0.05			0.13	0.27	0.20	0.38		0.18	0.16	0.12	0.16
1976	0.02		0.05	0.07	0.09	0.15	0.27	-0.04	-0.17	0.22	0.40	0.23	0.12
1977	0.23	0.16	0.03	0.05	0.15	-0.05	0.13	-0.42	-0.04	-0.19	-0.10	0.11	0.01
1978	0.04	-0.04	-0.07	-0.05	-0.09	0.22	-0.39	-0.92	-0.15	0.39	0.40		-0.06
1979	0.18	0.04	0.07		0.05	0.39	0.27	-0.49	-0.33	0.22	-0.03	-0.01	0.03
1980			-0.01	-0.05	-0.06	-0.10	0.34	0.56	0.17				0.12
1981	-0.03		-0.06	-0.15	-0.14	-0.02	-0.82		-0.10	0.16	-0.16	-0.16	-0.15
1982	0.15	0.15	0.22	0.19	0.10	-0.04	0.28		-0.26	-0.03	-0.25		0.05
1983		-0.02		-0.40	-0.63	-0.35	-0.28	-0.49	-0.43	-0.30	-0.39	-0.22	-0.35
1984	-0.19	-0.21		-0.17	-0.14	0.23	-0.35	-0.04	-0.38	-0.44	-0.29	-0.15	-0.19
1985	0.01	-0.09	0.07	0.10	0.20	0.25	0.27	0.02	-0.47	-0.34	0.03		0.00
1986	0.00	0.05	0.06	-0.04	-0.12	-0.16	-0.71	0.19	0.07	0.28	0.04	0.23	-0.01
1987	0.18	0.00		-0.10	-0.20	0.03	0.00	-0.18	0.49	0.24	0.10	0.12	0.06
1988		0.09		0.04	0.02	0.02	0.75	0.83	-0.27	0.00	0.21	-0.06	0.16
1989	-0.07	-0.05		0.17	0.35	0.23	-0.30	0.16	-0.20	0.55	0.27	0.33	0.13
1990	0.17	0.20	0.15	0.13	0.27	0.21	0.00	0.11	0.69	-0.18		0.21	0.18
1991		-0.03	-0.08	-0.23	-0.28	-0.28	0.17	0.29	0.27	-0.10	-0.70	-0.37	-0.12
1992	-0.37	-0.56	0.02	0.06	-0.04	-0.03	-0.49	-0.32	0.07	0.23	-0.05	-0.08	-0.13
1993	-0.03	-0.09	0.00	-0.13	-0.18	-0.16	-0.48	-0.46	0.65	0.29	0.03	0.01	-0.05
1994	0.03	-0.09		0.00	-0.09	-0.01	-0.51	-0.61	-0.90	0.07	-0.08	0.03	-0.20
1995		-0.12		-0.52	-0.53	-0.60	-0.55	-0.77	-0.04	0.02	0.09	0.03	-0.30
1996	-0.02	-0.25	-0.14	-0.15	-0.07	-0.14	-0.13	0.09	-0.21	-0.02	-0.15	-0.10	-0.11
1997	-0.09			-0.13	-0.22	0.00	0.13	-0.28	-0.30	-0.06	-0.22	-0.01	-0.12
1998	-0.10		-0.16	-0.19	-0.32	-0.13	-0.33	0.77	0.27	0.11	-0.02	0.13	0.00
1999	0.13		-0.03	-0.21	-0.30	-0.18	-0.33	-0.34	-0.14	-0.09	0.02	0.05	-0.13

MONTHLY AVERAGE 30 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.03	-0.85	-1.06	-0.56	-0.22	0.12	0.18	-0.34
1947			0.17		-0.06	-0.33	-0.76			0.04	0.37		-0.10
1948				0.13	0.14	-0.02	-0.23	-0.05					-0.01
1949						-0.44		-0.38	-0.03			0.20	-0.16
1950			0.24	0.29		-0.18	-0.45	-0.13	0.06		0.04	-0.10	-0.03
1951	-0.03	-0.17	-0.34	-0.48	-0.43	-0.27	-0.17	0.10	-0.48	-0.25			-0.25
1952	0.13			-0.05	-0.15	0.09	-0.14	0.01		-0.46		-0.07	-0.08
1953		-0.23		-0.32	-0.32	-0.33	-0.65	-0.54	-0.41	0.05	0.02	0.12	-0.26
1954	0.21	-0.07	-0.29		0.04	-0.04	-0.13	0.25		0.52	0.33	0.37	0.12
1955	0.13	0.13		-0.26		-0.22	-0.72	-0.82	-0.49	0.39	0.11	0.08	-0.17
1956	-0.12	-0.15	-0.11	-0.15	-0.12	-0.27	-0.11	0.49	0.24	0.13	0.02	-0.06	-0.02
1957	0.05		0.16		-0.38	-0.61	-0.45	0.29	-0.03	-0.19	-0.12	0.06	-0.12
1958		-0.19	-0.26	-0.33	-0.27	-0.40	-1.08	-1.67		-0.04	-0.03	0.16	-0.41
1959	0.25	0.26	0.30	0.23	0.00	-0.18	-0.14	0.02		0.00	0.09	-0.05	0.07
1960	-0.07	-0.24	-0.16	-0.18	-0.26	-0.04	0.13	0.17	-0.58	0.14	0.00	0.08	-0.08
1961	0.05	0.03	0.03		-0.43	0.21	0.02	-0.01	-0.05	-0.23	-0.22		-0.06
1962	-0.07	0.05	0.01		-0.14	-0.09	0.07	0.38	-0.22	0.11	-0.19		-0.01
1963	-0.03	0.01	0.10	0.08	0.03	-0.09	-0.08		-0.03	-0.02	-0.11	0.03	-0.01
1964	-0.08	0.08	0.17	0.19	0.18	0.37	0.02	-0.16	-0.25	0.50	0.38	0.15	0.13
1965	0.07	0.04	-0.07	-0.09	-0.13	-0.44	0.12	0.33	0.92	0.42	0.43	0.24	0.15
1966		0.06	0.02	-0.16	-0.04	-0.14	0.11	0.20	-0.13	0.69	0.21	-0.14	0.06
1967	-0.30	-0.18	0.00	-0.02	-0.03	-0.01	0.08	0.23	0.30	-0.11	0.10	0.15	0.02
1968	0.11	-0.08	-0.07	-0.14	-0.11	-0.02	-0.63	-0.21	-0.22	-0.10	-0.05	-0.02	-0.13
1969	0.14	-0.11	-0.16	-0.20	-0.23	-0.13	-0.17	0.08	0.12	0.25	0.24	-0.13	-0.03
1970	-0.15	-0.31	-0.34	-0.34	-0.33	-0.50	-0.88	-1.12		-0.27	-0.67	-0.32	-0.48
1971	0.00	-0.24	-0.16	-0.21	-0.28	-0.10	-0.28	-0.75	-0.28	-0.03	0.02	-0.01	-0.19
1972	0.00	0.05	0.14	0.16	0.06	0.20	-0.04	-0.32	-0.24	-0.01	0.04		0.00
1973	0.14	-0.01	0.06	0.09	-0.09	0.09	-0.04	-0.48	-0.90	-0.27	0.22	0.05	-0.10
1974	0.02	0.07	0.14	0.19	0.17	-0.31	-0.57	0.13	0.01	-0.56	-0.43		-0.10
1975	-0.06	0.03			0.03	0.10	-0.06	-0.08		0.63	0.17	0.13	0.10
1976	0.02	-0.05	0.01	0.05	0.07	-0.02	-0.16	0.00	-0.02	0.06	0.34	0.18	0.04
1977	0.21	0.18	0.06	0.07	0.12	-0.18	-0.10	-0.57	-0.15	-0.31	-0.03	0.06	-0.05
1978	0.06	0.01	-0.07	-0.01	-0.13	0.40	0.13	-0.01	-0.41		0.35		0.03
1979	0.26		0.06	0.09	-0.06	0.26	0.24	-0.24	-0.82	0.05	-0.05	0.00	-0.02
1980	0.05		-0.03	-0.03	-0.14	-0.06	0.20	0.01	-0.39				-0.05
1981	0.01		-0.06	-0.15	-0.06	0.11	0.27		0.40	0.01	-0.09	-0.21	0.02
1982	0.16	0.13	0.22	0.19	0.12	-0.12	0.22		0.16	-0.15	-0.26		0.07
1983		-0.03		-0.02	-0.04	0.40	0.03	-0.21	-0.33	-0.45	-0.41	-0.25	-0.13
1984	-0.19	-0.20		-0.19	-0.11	0.10	-0.25	-0.15	0.36	-0.12	-0.32	-0.06	-0.10
1985	0.03	-0.07	0.05	0.07	0.15	0.28	0.24	0.16	-0.66	-0.51	0.03		-0.02
1986	-0.01	0.03	0.05	-0.02	-0.12	-0.05	-0.47	0.10	-0.38	0.07	0.07	0.20	-0.04
1987	0.16	0.00		0.04	0.08	-0.12	-0.16	-0.07	0.73	0.17	0.13	0.05	0.09
1988		0.08		0.03	-0.05	0.21	0.48	0.53	-0.16	0.30	0.62	-0.13	0.19
1989		-0.07		0.17	0.28	0.29	-0.17	0.12	0.62	0.63	0.26	0.31	0.24
1990	0.19	0.21	0.17	0.11	0.15	0.08	-0.09	0.55	0.98	-0.05		0.18	0.23
1991		-0.05	-0.10	-0.18	-0.25	-0.22	0.00	0.26	-0.17	0.51	-0.69	-0.39	-0.12
1992	-0.38	-0.57	0.02	0.07	-0.14	-0.12	-0.73	-0.39	-0.09	0.12	0.01	-0.14	-0.20
1993	0.01	-0.01	0.01	-0.11	-0.25	-0.26	-0.76	-0.25	0.44	0.67	0.03	-0.04	-0.04
1994	0.01	-0.11		-0.03	-0.11	0.11	-0.03	0.08	-0.74	-0.13	0.05	0.06	-0.08
1995		-0.09		-0.28	-0.45	-0.16	-0.44	-0.34	-0.07	0.54	0.16	0.01	-0.11
1996	-0.02	-0.26	-0.13	-0.15	-0.13	-0.20	-0.53	-0.18	-0.51	-0.07	0.06	-0.12	-0.19
1997	-0.07			-0.14	-0.27	-0.07	-0.10	0.33	0.25	-0.16	-0.26	-0.04	-0.05
1998	-0.12		-0.18	-0.16	-0.30	-0.24	-0.33	0.48	0.36	0.22	0.07	0.12	-0.01
1999	0.18		-0.03	-0.22	-0.17	-0.10	-0.08	-0.01	0.03	0.09	0.03	0.01	-0.02

MONTHLY AVERAGE 50 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.06	-0.28	-0.50	-0.11	-0.46	0.15	0.19	-0.14
1947			0.14		-0.10	-0.18	-0.39		-0.19		0.54		-0.03
1948				0.19	0.04	0.03	-0.11	-0.11					0.01
1949						-0.22		0.12	0.09			0.22	0.05
1950				0.30		0.02	0.24	0.20	0.46		0.23	0.09	0.22
1951	0.09		-0.25	-0.33	-0.34	-0.01	-0.11	-0.08		0.79			-0.03
1952	0.19			-0.01	0.09	0.18	0.18	0.03		0.14		-0.08	0.09
1953		-0.20		-0.04	0.13	0.09	-0.07	-0.19	-0.28	-0.21	-0.13	0.10	-0.08
1954	0.10	-0.05	-0.19	-0.13	-0.04	0.03	0.10	0.28	0.73	0.49	0.11	0.34	0.15
1955	0.12	0.14		-0.26	-0.10	0.09	0.15	-0.10	-0.14	0.13	0.29	0.15	0.04
1956	0.08	-0.08	-0.17	-0.13	-0.05	0.07	0.04	0.14	0.26	0.12	-0.05	-0.12	0.01
1957	0.00	0.09	0.02	-0.06	-0.08	-0.18	-0.16	0.14	0.10	0.21	0.14	0.00	0.02
1958		-0.08	-0.29	-0.27	-0.12	-0.13	-0.19	-0.26	-0.32	-0.08	-0.02	0.15	-0.15
1959		0.27	0.24	0.21	0.05	-0.21	-0.19	-0.17		-0.01	0.14	-0.15	0.02
1960	-0.13		-0.18	-0.14	-0.14	-0.14	-0.12	-0.09	0.11	0.40	-0.05	0.12	-0.03
1961	-0.02	0.00	-0.02		-0.19	0.05	-0.01	-0.13	-0.18		-0.13		-0.07
1962	-0.15	0.04	-0.03		-0.16	-0.05	-0.06	0.09	0.09	0.07	0.11		0.00
1963	-0.04	0.00	0.05	0.06	0.00	0.09	0.12	0.03	0.16	0.01	0.36	0.02	0.07
1964	-0.20	0.00	0.10	0.16	0.08	0.21	0.22	0.16	0.08	0.36	0.28	0.26	0.14
1965	0.04	0.00	-0.14	-0.03	-0.13	-0.20	-0.01	0.14	0.13	0.05	0.34	0.16	0.03
1966		0.15	0.00	-0.18	-0.08	-0.25	-0.09	0.02	0.13	0.30	0.05	-0.25	-0.02
1967	-0.29	-0.06	-0.06	-0.06	0.01	0.04	0.10	0.12	0.07	0.14	0.36	0.15	0.04
1968	0.03	-0.10	-0.09	-0.13	-0.25	-0.23	-0.33	-0.33	-0.40	-0.83	-0.30	-0.04	-0.25
1969	0.07	-0.15	-0.20	-0.23	-0.24	-0.21	-0.14	0.02	-0.05	-0.31	0.23	0.27	-0.08
1970	0.08	-0.13	-0.28	-0.36	-0.26	-0.20	-0.14	-0.03		-0.83	-0.58	-0.39	-0.28
1971	0.02	-0.24	-0.14	-0.23	-0.20	-0.14	-0.30	-0.36	-0.15	-0.27	-0.07	-0.11	-0.18
1972	-0.09	0.01	0.12	0.11	0.01	0.05	0.09	0.08	0.28	0.69	0.22		0.14
1973	0.18	0.03	0.00	0.05	-0.01	0.06	-0.02	-0.11	-0.57	-0.10	0.37	-0.04	-0.01
1974	-0.06	0.05	0.08	0.13	0.13	-0.07	-0.10	0.09	0.26	-0.58	-0.39		-0.04
1975	0.01	0.08			-0.08	-0.13	-0.12	0.07	0.66	0.40	0.21	0.19	0.13
1976	0.11	-0.04	-0.03	0.07	0.01	-0.15	-0.17	-0.15	0.03	-0.05	0.21	0.08	-0.01
1977	0.16	0.14	0.03	0.05	0.17	0.14	0.05	-0.09	-0.43	0.01	0.00	0.03	0.02
1978	0.01	0.04	0.13	0.05	0.01	0.24	0.06	-0.11	-1.03		0.33		-0.03
1979	0.09	0.14	0.04	0.04	-0.14	0.09	0.13	0.01	-0.35	0.23	0.01	-0.05	0.02
1980	-0.05		-0.07	-0.10	-0.15	-0.04	0.04	-0.15	-0.61				-0.14
1981	-0.07		-0.07	-0.07	0.00	-0.01	-0.01		0.21	-0.22	-0.13	-0.22	-0.06
1982	0.17	0.10	0.17	0.21	0.12	0.12	0.19		0.20	0.11	-0.49		0.09
1983		-0.06		0.11	-0.02	0.20	0.10	0.08	0.23	-0.56	-0.45	-0.26	-0.06
1984	-0.18	-0.15		-0.24	-0.12	0.03	0.07	-0.33	0.02	-0.45	-0.34	0.10	-0.14
1985	0.03	-0.02	0.03	0.03	0.05	0.08	0.12	0.10	0.30	-0.62	0.00		0.01
1986	-0.03	0.08	0.02	-0.04	-0.09	-0.05	-0.14	-0.13	-0.18	-0.44	-0.03	0.13	-0.08
1987	0.09	0.03		0.18	0.22	0.05	-0.09	-0.20	0.22	0.69	0.40	-0.06	0.14
1988		0.14		0.05	0.00	0.17	0.30	0.25	0.38	0.74	0.58	-0.21	0.24
1989	-0.09	-0.05		0.19	0.26	0.19	0.01	0.06	0.05	0.47	0.29	0.25	0.15
1990	0.11	0.18	0.13	0.14	0.04	0.01	-0.01	0.08	0.43	0.01		0.15	0.12
1991		-0.08	-0.16	-0.16	-0.17	-0.26	-0.08	-0.06	-0.21	0.90	-0.08	-0.31	-0.06
1992	-0.24	-0.40	0.00	0.08	-0.15	-0.06	-0.29	-0.11	0.21	0.22	0.03	-0.19	-0.08
1993	0.04	0.04	0.03	-0.06	-0.30	-0.11	-0.50	-0.02	0.44	0.49	0.15	-0.17	0.00
1994	-0.09	-0.16		-0.04	-0.17	0.00	0.00	0.03	-0.18	-0.33	0.07	0.03	-0.08
1995		-0.07		-0.17	-0.32	-0.12	-0.12	-0.12	0.07	0.62	0.31	-0.05	0.00
1996	-0.09	-0.26	-0.13	-0.18	-0.13	-0.23	-0.36	-0.23	-0.53	-0.10	0.11	-0.15	-0.19
1997	-0.12			-0.14	-0.15	-0.08	-0.07	0.07	0.27	0.70	0.27	-0.04	0.07
1998	-0.20		-0.24	-0.10	-0.20	-0.16	-0.02	0.11	0.33	0.35	0.26	0.12	0.02
1999	0.07		-0.06	-0.19	-0.16	-0.07	-0.14	-0.15	0.05	0.32	0.06	0.05	-0.02

MONTHLY AVERAGE 75 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947			0.03		-0.04	-0.15	-0.31						-0.12
1948				0.11	0.08	0.09	-0.07	-0.13					0.02
1949						0.04		0.10	0.03			0.22	0.10
1950			0.24	0.26		0.12	0.27	0.30	0.05		0.11	0.12	0.18
1951	0.07	-0.18	-0.19	-0.20	-0.19	-0.04	-0.02	-0.07	-0.05	0.00			-0.09
1952	0.23			0.05	0.17	0.24	0.19	0.09		0.06		0.16	0.15
1953		-0.06		0.02	0.11	0.08	-0.04	-0.18	-0.42	-0.21	-0.39	0.11	-0.10
1954	0.12	-0.13	-0.16	-0.21	-0.08	-0.03	0.12	0.19	0.27	0.12	-0.16	0.23	0.02
1955	0.05	0.08		-0.23	-0.09	0.04	0.16	0.13	0.01	-0.15	0.00	0.12	0.01
1956	0.16	-0.05	-0.11	-0.14	-0.07	0.06	0.04	0.03	0.06	0.02	0.00	0.29	0.02
1957	0.09	0.04	-0.01	-0.07	0.03	0.00	-0.11	0.11	0.05	0.20	0.09	0.11	0.04
1958	-0.10	-0.08	-0.19	-0.16	-0.08	-0.06	-0.13	-0.13	-0.30	-0.19	-0.28	0.00	-0.14
1959	0.25	0.23	0.20	0.14	0.02	-0.07	-0.04	-0.07	-0.24	0.00	0.11	-0.12	0.03
1960	-0.12	-0.19	-0.19	-0.21	-0.17	-0.17	-0.16	-0.13	0.00	-0.01	-0.02	0.21	-0.10
1961	0.07	-0.06	-0.04		-0.07	0.01	0.01	-0.13	-0.29	-0.16	-0.07		-0.07
1962	0.08	0.03	-0.03		-0.10	0.04	0.[illegible]0	0.10	0.07	0.13	0.33		0.07
1963	0.01	-0.05	0.03	0.00	0.00	0.03	0.03	0.05	-0.04	-0.08	0.20	0.16	0.03
1964	-0.22	0.07	0.08	0.12	0.04	0.14	0.17	0.21	0.23	0.15	-0.12	0.37	0.10
1965	0.17	-0.06	-0.10	0.04	-0.07	-0.18	0.01	0.07	0.04	0.06	0.22	0.15	0.03
1966		0.09	0.02	-0.18	-0.05	-0.25	-0.06	-0.01	0.02	0.14	0.07	0.01	-0.02
1967	-0.22	-0.06	-0.04	-0.09	0.06	0.01	0.02	0.06	-0.16	-0.14	0.13	0.10	-0.03
1968	-0.05	-0.06	-0.01	-0.13	-0.21	-0.30	-0.30	-0.18	-0.15	0.04	-0.21	-0.05	-0.13
1969	0.06	-0.13	-0.14	-0.25	-0.20	-0.19	-0.12	-0.07	-0.01	-0.09	0.16	0.37	-0.05
1970	0.05	-0.09	-0.16	-0.33	-0.24	-0.21	-0.09	-0.07		-0.35	-0.13	-0.22	-0.17
1971	0.03	-0.06	0.00	-0.08	-0.13	-0.17	-0.19	-0.33	-0.29	-0.76	-0.02	-0.08	-0.17
1972	-0.19	-0.06	0.14	0.06	-0.04	0.01	0.12	0.08	0.14	0.06	0.01		0.03
1973	0.17	0.02	0.02	0.07	0.09	0.02	0.01	0.02	-0.17	0.14	0.42	-0.04	0.06
1974	-0.15	0.02	0.08	0.15	0.13	0.13	0.06	0.13	0.15	0.26	0.26		0.11
1975	-0.05	0.03			-0.08	-0.15	-0.11	-0.02	0.11	-0.23	-0.02	0.13	-0.04
1976	0.10	-0.09	-0.04	0.03	0.00	-0.08	-0.19	-0.14	-0.23	-0.14	-0.21	-0.06	-0.09
1977	0.07	0.12	0.01	0.01	0.16	0.10	0.14	0.00	0.09	0.07	0.02	-0.08	0.06
1978	0.01	0.01	0.06	-0.04	0.06	0.13		0.06	-0.12	0.37	0.32		0.09
1979	0.24	0.26	0.13		-0.02	0.06	0.06	0.06	0.12	0.28	-0.01	-0.14	0.09
1980	-0.19		-0.02	-0.06	-0.04	-0.07	0.00	-0.02	-0.13				-0.07
1981	0.13		-0.03	-0.11	0.02	-0.02	-0.09		-0.07	-0.21	-0.24	0.02	-0.06
1982	0.19	0.05	0.16	0.17	0.15	0.12	0.11		0.01	-0.23	-0.79		-0.01
1983		-0.12		0.10	0.01	0.12	0.07	0.03	-0.02	0.04	0.00	-0.25	0.00
1984	-0.22	-0.07		-0.30	-0.08	0.03	0.07	-0.10	-0.04	-0.03	-0.25	0.12	-0.08
1985	0.01	-0.03	0.03	-0.04	0.02	0.03	0.04	0.07	0.11	0.03	0.02		0.03
1986	-0.02	0.01	0.00	-0.11	-0.11	-0.12	-0.18	-0.14	-0.16	-0.31	0.21	0.03	-0.08
1987	0.01	0.05		0.16	0.19	0.09	-0.02	-0.13	-0.01	0.07	0.16	-0.14	0.04
1988		0.13		0.04	0.04	0.14	0.19	0.19	0.11	0.20	0.15	-0.14	0.11
1989	-0.05	-0.08		0.14	0.21	0.16	0.10	0.09	-0.07	0.12	0.08	0.20	0.08
1990	0.03	0.11	0.12	0.09	0.00	0.02	0.04	0.02	0.03	0.01		0.12	0.05
1991		-0.16	-0.18	-0.09	0.01	-0.14	-0.03	-0.06	-0.12	0.24	0.24	-0.22	-0.05
1992	-0.27	-0.37	-0.01	0.01	-0.14	-0.10	-0.10	-0.07	-0.03	-0.13	0.09	-0.03	-0.10
1993	0.14	0.05	0.01	-0.08	-0.06	0.02	-0.12	0.03	0.12	0.10	0.10	-0.22	0.01
1994	-0.12	-0.22		-0.09	-0.11	-0.05	-0.04	0.01	-0.23	-0.66	0.07	0.08	-0.12
1995		-0.01		-0.11	-0.25	-0.14	-0.11	-0.03	-0.19	0.08	0.20	0.03	-0.05
1996	-0.12	-0.11	-0.09	-0.24	-0.18	-0.21	-0.24	-0.23	-0.50	-0.15	-0.08	-0.15	-0.19
1997	-0.09			-0.18	-0.12	-0.05	-0.04	0.02	0.03	0.29	0.35	0.05	0.03
1998	-0.12		-0.07	-0.08	-0.19	-0.10	-0.10	-0.04	-0.01	0.22	0.30	0.20	0.00
1999	0.16		0.01	-0.11	-0.12	-0.10	-0.15	-0.16	-0.18	-0.11	-0.03	0.02	-0.07

MONTHLY AVERAGE 100 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946						0.02	-0.13	-0.10	0.00	-0.06	-0.20	-0.23	-0.10
1947			-0.06		-0.05	-0.13	-0.25		-0.29	-0.18			-0.16
1948				0.05	0.06	0.07	-0.01	-0.03					0.03
1949						0.05		0.11	0.14			0.23	0.13
1950				0.28		0.16	0.23	0.24	0.08		-0.01	0.16	0.16
1951	0.12	-0.14	-0.18	-0.14	-0.07	-0.02	0.02		-0.03	-0.10			-0.06
1952	0.21			0.10	0.19	0.42	0.23	0.12		-0.12		0.14	0.16
1953		-0.04		0.10	0.14		0.03	-0.07		-0.03	-0.07	0.07	0.02
1954	0.23	-0.01	-0.07	-0.11	-0.12	0.03	0.16	0.16	0.23	0.09	-0.10	0.11	0.05
1955	-0.07	0.01		-0.07	-0.08	0.03	0.11	0.13	0.13		-0.04	0.03	0.02
1956	0.02	-0.01	-0.13	-0.09		0.06	0.01	0.01	0.02	-0.09	-0.16	0.02	-0.03
1957	0.01	0.02	-0.03	-0.03	0.07	0.03	-0.07	0.10	-0.02	-0.01	-0.01	0.09	0.01
1958	-0.16	-0.09	-0.12	-0.10	-0.04	-0.07	-0.10	-0.12	-0.16	-0.28	-0.21	0.02	-0.12
1959	0.22	0.18	0.16	0.09	0.02	-0.03	-0.10	-0.05	-0.08	0.05	0.04	-0.16	0.03
1960	-0.12	-0.21	-0.18	-0.17	-0.18	-0.25	-0.19	-0.16	-0.04	-0.09	-0.01	0.05	-0.13
1961	0.02	-0.11	-0.13		-0.06	0.00	-0.01	-0.12	-0.16	-0.22	-0.08		-0.09
1962	0.13	0.00	-0.11		0.00	0.05	0.01	0.05	-0.07	0.07	0.17		0.03
1963	0.10	-0.12	-0.04	-0.03	0.00	0.04	0.02	0.00	-0.01	-0.05	0.04	0.15	0.01
1964		0.20	0.12	0.11	0.02	0.10	0.13	0.19	0.20	0.22	-0.03	0.22	0.13
1965	0.25	-0.09	-0.14	0.00	-0.07	-0.01	0.02	0.02	0.04	0.01	0.13	0.41	0.05
1966		0.00	0.03	-0.03	-0.05	-0.12	-0.06	-0.03	-0.04	-0.04	0.14	0.07	-0.01
1967	-0.18	-0.13	-0.01	-0.07	0.02	-0.01	-0.05	-0.05	-0.11	-0.13	0.02	0.02	-0.06
1968	-0.12	-0.09	0.00	-0.10	-0.11	-0.12	-0.14	-0.13	-0.03	-0.03	0.10	0.04	-0.06
1969	0.08	-0.15	-0.04	-0.25	-0.19	-0.19	-0.15	-0.10	-0.09	-0.15	0.06	0.33	-0.07
1970	0.00	0.00	-0.09	-0.17	-0.19	-0.18	-0.11	-0.13		-0.19	-0.07	-0.31	-0.13
1971	-0.09	0.03	0.05	-0.02	-0.12	-0.17	-0.18	-0.23	-0.27		0.00	-0.14	-0.10
1972	-0.14	-0.03	-0.07	-0.03	-0.05	-0.04	0.05	0.08	0.04	-0.19	-0.27		-0.05
1973	0.08	0.08	0.06	0.05	0.02	-0.01	0.04	0.07	-0.05	0.08	0.30	0.10	0.07
1974	-0.18	0.01	0.06	0.13	0.12	0.10	0.13	0.11	0.17	0.06	0.24		0.09
1975	-0.03	0.02			-0.15	-0.18	-0.11	0.01	0.10	-0.15	-0.07	-0.13	-0.07
1976	0.04	-0.06	-0.03	-0.01	-0.07	-0.03	-0.12	-0.08	-0.09	0.05	0.03	-0.01	-0.03
1977	0.21	0.15	-0.02	0.01	0.11	0.04	0.11	-0.01	0.00	0.00	0.16	-0.07	0.06
1978	0.00	0.03	-0.04	0.03	0.03	0.12		0.02	-0.04	0.27	0.09		0.05
1979	0.31	0.25	0.17	0.06	-0.06	0.10	0.05	0.05	0.12	0.14	0.24	-0.06	0.11
1980	-0.01		0.12	0.07	0.00	0.01	-0.03	-0.02	0.02				0.02
1981	0.18		-0.06	-0.09	0.00	-0.03	-0.12		-0.08	-0.20	-0.20	0.10	-0.05
1982	0.22	-0.01	0.12	0.11	0.09	0.08	0.06		-0.04	0.01			0.07
1983		-0.15		0.08	-0.05	0.10	0.03	0.00	0.06	0.00	0.13	-0.26	-0.01
1984	-0.21	-0.09		-0.22	0.01	0.05	0.04	-0.04	0.08	0.06	-0.12	-0.03	-0.04
1985	-0.03	-0.09	-0.03	-0.03	0.00	-0.02	0.00	0.04	0.07	0.04	0.10		0.00
1986	0.06	-0.02	-0.02	-0.14	-0.15	-0.18	-0.21	-0.20	-0.10	-0.13	0.00	-0.10	-0.10
1987	-0.11	0.03		0.11	0.15	0.10	0.02	-0.03	-0.01	-0.07	-0.04	0.01	0.01
1988		0.15		0.05	0.04	0.17	0.16	0.15	0.08	0.03	-0.18	-0.06	0.06
1989	0.04	-0.12		0.18	0.17	0.14	0.11	0.14	0.02	0.01	-0.03	-0.07	0.05
1990	-0.02	0.04	0.08	0.07	-0.03	0.03	0.02	0.01	0.00	-0.03		-0.07	0.01
1991		-0.25	-0.20	-0.11	0.01	-0.06	-0.06	-0.09	-0.22	-0.03	0.06	-0.05	-0.09
1992	-0.27	-0.32	-0.03	0.03	-0.17	-0.13	-0.15	-0.13	-0.09	-0.05	0.04	-0.05	-0.11
1993	0.10	0.07	0.00	-0.06	-0.03	0.04	-0.08	-0.02	0.05	0.04	0.08	-0.16	0.00
1994	-0.10	-0.15		-0.02	-0.11	-0.08	-0.10	0.03	-0.09	-0.18	-0.17	0.02	-0.09
1995		0.00		-0.07	-0.16	-0.10	-0.10	-0.02	-0.10	-0.03	0.13	-0.02	-0.05
1996	-0.10	-0.09	-0.05	-0.27	-0.20	-0.21	-0.26	-0.23	-0.36	-0.23	-0.10	-0.18	-0.19
1997	-0.04			-0.18	-0.11	-0.04	-0.07	-0.03	-0.02	0.06	0.05	-0.10	-0.05
1998	0.03		-0.09	-0.06	-0.13	-0.08	-0.14	-0.08	-0.04	0.00	0.20	0.13	-0.02
1999	0.18		0.02	0.02	-0.09	-0.09	-0.18	-0.17	-0.16	-0.23	-0.05	-0.03	-0.07

MONTHLY AVERAGE 125 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1947									-0.27	-0.21			-0.24
1950									0.07			0.04	0.06
1951						0.07							0.07
1957				0.02									0.02
1964			0.16	0.15	0.03	0.12		0.15	0.14	0.15	0.18		0.14
1965	0.16	0.00	0.01	0.05	-0.06	-0.04	0.02	0.02	-0.02	0.02	0.09	0.32	0.05
1966		0.05	0.00	0.02	-0.02	-0.08	-0.03	-0.05	-0.03	0.04	0.12	0.03	0.00
1967	-0.05	-0.12	0.06	-0.09	0.00	-0.04	-0.04	-0.08	-0.12	-0.08	0.06	-0.08	-0.05
1968	-0.17	-0.13	-0.01	-0.08	-0.04	-0.07	-0.03	-0.04	0.01	0.06	0.18	0.06	-0.02
1969	0.11	0.02	0.01	-0.23	-0.17	-0.13	-0.16	-0.12	-0.01	-0.02	-0.07	0.17	-0.05
1970	-0.06	0.06	-0.08	-0.18	-0.15	-0.18	-0.09	-0.18		-0.19	-0.18		-0.12
1971	-0.08	0.00	0.04	-0.04	-0.17	-0.18	-0.16	-0.22	-0.25	-0.34	0.00	-0.25	-0.14
1972	-0.16	0.01	0.02	-0.02	-0.01	0.01	0.04	0.03	-0.01	-0.15	-0.17		-0.04
1973	0.04	0.02	0.04	0.06	0.01	0.02	0.06	0.08	0.03	0.08	0.16	-0.03	0.05
1974	-0.14	-0.09	-0.01	0.09	0.11	0.12	0.10	0.06	0.09	0.07	0.13		0.05
1975	-0.04	0.04			-0.17	-0.13	-0.07	0.01	0.15	-0.17	-0.05	-0.17	-0.06
1976	0.02	-0.07	-0.08	-0.04	-0.06	0.00	-0.06	-0.02	0.02	0.10	0.15	0.23	0.02
1977	0.24	0.08	0.01	0.05	0.09	0.06	0.06	-0.02	-0.04	0.23	0.20	0.01	0.08
1978	0.08	0.09	0.07	0.01	0.03	0.08	-0.06	-0.01	-0.02		-0.02		0.03
1979	0.29	0.23		0.14	0.01	0.10	0.06	0.03	0.12	0.19	0.22	0.08	0.13
1980	-0.02		0.09	0.02	0.10	0.01	-0.01	-0.02	0.01				0.02
1981	0.24		-0.24	-0.06	-0.01	-0.03	-0.13		-0.13	-0.19	-0.10	0.13	-0.05
1982	0.18	0.09	0.06	0.05	0.06	0.06	0.05		-0.05	-0.04	-0.45		0.00
1983		-0.19					0.02	-0.01	0.06	-0.07	0.08	-0.20	-0.04
1984	-0.16	-0.06		-0.24	0.01	0.04	0.05	-0.05	0.11	0.04	0.03	-0.17	-0.04
1985	-0.10	-0.09	-0.07	-0.04	0.00	0.02	0.01	-0.01	0.01	-0.07	0.07		-0.02
1986	0.09	-0.08	-0.10	-0.18	-0.22	-0.22	-0.24	-0.23	-0.04	-0.02	0.01	-0.10	-0.11
1987	-0.20	0.02		0.12	0.11	0.07	0.05	-0.02	0.03	-0.03	-0.07	0.02	0.01
1988		0.13		0.03	0.07	0.16	0.15	0.12	0.05	-0.03	-0.37	-0.19	0.01
1989	-0.06	-0.08		0.16	0.15	0.16	0.11	0.15	0.07	0.09	0.10	-0.03	0.07
1990	0.08	0.02	0.07	0.05	-0.04	0.00	0.02	-0.01	0.00	-0.05		-0.05	0.01
1991		-0.36	-0.24	-0.14	-0.03	-0.06	-0.06	-0.11	-0.19	-0.11	-0.07	-0.07	-0.13
1992	-0.27	-0.33	-0.10	0.01	-0.20	-0.15	-0.16	-0.17	-0.15	-0.11	0.03	-0.07	-0.14
1993	0.01	0.00	-0.06	-0.07	-0.05	0.05	-0.05	-0.01	-0.02	0.01	0.07	-0.30	-0.04
1994	-0.11	-0.16		-0.06	-0.12	-0.12	-0.11	-0.01	-0.12	-0.09	-0.17	-0.01	-0.10
1995		-0.06		-0.04	-0.13	-0.07	-0.08	-0.05	-0.11	-0.07	0.01	-0.08	-0.07
1996	-0.11	-0.12	-0.07	-0.26	-0.19	-0.18	-0.22	-0.23	-0.33	-0.20	-0.17	-0.09	-0.18
1997	0.00			-0.20	-0.10	-0.04	-0.06	-0.08	-0.05	0.00	-0.03	-0.14	-0.07
1998	0.09		-0.13	-0.04	-0.13	-0.07	-0.13	-0.11	-0.07	-0.04	0.08	0.11	-0.04
1999	0.11		0.07	0.03	-0.08	-0.10	-0.17	-0.20	-0.19	-0.21	-0.11	-0.16	-0.09

MONTHLY AVERAGE 150 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946							-0.09	0.02	-0.07	-0.04	-0.08	-0.13	-0.07
1947			-0.24		-0.11	-0.14	-0.22		-0.28	-0.14	-0.02		-0.16
1948				0.08	0.03	0.07	0.02	0.07					0.05
1949						-0.08		0.04	0.06			0.11	0.03
1950			0.09	0.17		0.14	0.19	0.18	0.19		0.22	-0.04	0.14
1951	-0.06	-0.07	-0.15	-0.08	-0.01	0.09	0.11	-0.05	0.11	-0.09			-0.02
1952	0.23			0.10	0.13	0.28	0.08	0.07	-0.07	-0.24		-0.12	0.05
1953		-0.06		0.26	0.22	0.11	0.06	-0.08	-0.20	-0.04	0.03	-0.12	0.02
1954	0.06	-0.02	-0.01	0.02	-0.06	0.06	0.15	0.09	0.05	0.01	0.09	0.20	0.05
1955		0.11		-0.01	-0.02	-0.03	0.08	0.04	0.08		0.07	-0.01	0.03
1956	-0.07	0.07	0.00		-0.22	0.03	0.01	-0.07	-0.14	-0.15	-0.01	-0.07	-0.06
1957	0.07	0.02	-0.03	0.02	0.12	0.03	-0.03	0.07	-0.01	0.11	0.08	0.09	0.05
1958	0.13	0.20	0.05	0.01	-0.03	-0.07	-0.13	-0.13	-0.19	-0.13	-0.08	-0.21	-0.05
1959	-0.03	-0.04	0.08	0.02	-0.02	-0.08	-0.11	-0.12	-0.06	-0.06	-0.05	-0.09	-0.05
1960	-0.20	-0.27	-0.15	-0.08	-0.18	-0.22	-0.17	-0.24	0.01	-0.15	-0.09	-0.15	-0.16
1961	-0.17	-0.22	-0.19		0.01	0.02	-0.04	-0.07	-0.13	-0.04	-0.02		-0.09
1962	0.17	0.01	-0.15		0.06	0.05	0.03	0.03	-0.09	0.10	0.15		0.04
1963	-0.03	0.13	-0.04	-0.07	0.06	0.05	-0.04	-0.09	-0.09	-0.06	0.04	-0.06	-0.02
1964		0.05	0.13	0.14	0.01	0.08	0.04	0.10	0.05	0.07	0.23	0.32	0.11
1965	0.08	-0.10	0.10	0.03	-0.06	-0.08	-0.02	0.00	-0.04	-0.02	0.05	0.10	0.00
1966		0.12	0.04	0.00	-0.02	-0.02	0.03	0.02	0.13	0.05	0.11	-0.02	0.04
1967	0.00	0.18	0.13	-0.08	-0.02	-0.03	-0.07	-0.07	-0.13	0.00	0.07	0.02	0.00
1968	-0.14	-0.07	-0.02	-0.05	0.01	-0.03	-0.01	-0.02	0.05	0.06	0.18	0.22	0.02
1969	0.22	-0.06	0.04	-0.02	-0.08	-0.14	-0.11	-0.05	0.03	0.01	-0.11	0.03	-0.02
1970	-0.13	0.06	-0.06	-0.19	-0.09	-0.16	0.00	-0.15		-0.22	-0.23	-0.40	-0.14
1971	-0.16	0.00	0.06	-0.10	-0.19	-0.18	-0.12	-0.21	-0.13	-0.30	-0.04	-0.12	-0.12
1972	-0.08	0.08	0.02	-0.02	-0.07	-0.05	0.02	0.02	-0.03	-0.11	-0.05		-0.02
1973	-0.18	-0.03	0.06	0.04	0.00	0.00	0.02	0.03	-0.03	0.07	0.07	-0.15	-0.01
1974	-0.30	-0.13	-0.03	0.00	0.07	0.06	0.08	0.02	0.05	0.02	0.07		-0.01
1975	-0.19	0.12			-0.18	-0.09	-0.02	0.07	0.18	-0.14	0.03	0.04	-0.02
1976	0.06	-0.09	-0.10	-0.07	-0.05	0.05	-0.03	-0.04	0.01	0.02		0.10	-0.01
1977	0.15	0.08	0.07	0.02	0.10	0.04		-0.17	-0.08	0.00	0.08	0.03	0.03
1978	0.10	0.01		-0.03	0.03	0.06	-0.13	0.02	0.01	0.16	0.00		0.02
1979	0.11	0.11	0.18	0.19	0.04	0.05	0.10	0.05	0.09	0.19	0.18	0.20	0.12
1980	0.33		0.16	0.08	0.05		-0.02	0.03	0.00				0.09
1981	0.22		-0.01	0.01	0.06	0.01	-0.12		-0.02	-0.13	-0.06	0.21	0.02
1982	0.21	0.14	0.04	0.04	0.06	0.05	0.07		-0.01	-0.05	-0.21		0.03
1983		-0.25		-0.01	-0.07	-0.03	0.00		0.06	-0.04	0.02	-0.14	-0.05
1984	-0.15	-0.09		-0.12	0.00	0.04	-0.03	0.04	0.04	0.03	0.00	-0.14	-0.03
1985	-0.08	-0.06	-0.09	-0.07	0.02	0.00	-0.01	-0.03	-0.01	-0.05	0.02		-0.03
1986	0.00	-0.06	-0.13	-0.20	-0.24	-0.22	-0.27	-0.22	-0.01	0.09	-0.13	0.00	-0.12
1987	0.00	0.06		0.10	0.14	0.06	0.08	-0.01	-0.01	0.01	0.04	0.24	0.06
1988		0.07		0.05	0.09	0.17	0.15	0.16	0.05	0.04	-0.34	-0.18	0.03
1989	-0.15	-0.15		0.15	0.17	0.18	0.13	0.16	0.10	0.08	0.05	-0.02	0.06
1990	0.08	0.08	0.03	0.01	-0.05	-0.02	0.02	-0.02	-0.02	-0.12		0.05	0.00
1991		-0.36	-0.31	-0.03	-0.02	-0.07	-0.08	-0.12	-0.23	-0.15	-0.13	-0.17	-0.15
1992	-0.39	-0.33	-0.18	-0.02	-0.17	-0.18	-0.18	-0.19	-0.18	-0.05	-0.06	0.08	-0.15
1993	-0.05	0.05	-0.07	-0.06	-0.01	0.03	-0.02	-0.01	-0.05	-0.03	0.00	-0.14	-0.03
1994	-0.16	-0.15		-0.10	-0.14	-0.18	-0.14	0.00	-0.14	-0.03	-0.10	-0.10	-0.11
1995		-0.09		-0.04	-0.06	-0.08	-0.09	-0.04	-0.13	-0.09	-0.07	-0.08	-0.08
1996	-0.16	-0.13	-0.07	-0.18	-0.16	-0.18	-0.19	-0.19	-0.25	-0.14	-0.22	-0.20	-0.17
1997	-0.12			-0.19	-0.07	-0.03	-0.07	-0.11	-0.06	-0.06	-0.07	-0.08	-0.09
1998	0.08		-0.11	-0.07	-0.13	-0.06	-0.13	-0.14	-0.09	0.01	0.06	-0.04	-0.06
1999	-0.08		0.10	0.05	-0.05	-0.09	-0.17	-0.16	-0.15	-0.20	-0.06	-0.19	-0.09

MONTHLY AVERAGE 175 METER SIGMA-t ANOMALIES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
1946												-0.16	-0.16
1947						-0.15	-0.23		-0.15	0.22	0.23		-0.02
1948				0.00	-0.02	0.03	0.09	0.23					0.07
1949						0.08		0.11	0.05				0.08
1950			0.00	0.07			0.18	0.16	0.13		0.12	0.14	0.11
1951		-0.12	-0.09	0.00	-0.01	0.10	0.04	-0.02	0.14	0.03			0.01
1952	0.19			0.12	0.20	0.26	0.11	0.11	0.09	-0.03		-0.11	0.10
1953		-0.21		0.19	0.12	0.12	0.15	-0.03	-0.02	0.05	0.09	0.04	0.05
1954	0.09	-0.02	0.00		0.01	0.12	0.16	0.07	0.11	0.11	0.12	0.20	0.09
1955	0.15	0.11		0.01	0.05	-0.03	0.03	-0.01		0.01	0.10	-0.01	0.04
1956	0.10	0.16	-0.03		-0.11	0.02	0.00	-0.08	0.04	0.01	-0.09	0.03	0.00
1957		-0.02	-0.08		0.12	0.13	0.06	0.09	-0.07	0.10	0.08	0.12	0.05
1958	0.13	0.17	0.07	0.01	0.05	0.02	-0.12	-0.15	-0.10	0.03	-0.02		0.01
1959	0.13	-0.09	-0.03	-0.01	-0.07	-0.13	-0.14	-0.14	-0.07	-0.06	-0.14	-0.11	-0.07
1960	-0.08	-0.05	-0.17	-0.12	-0.04	-0.12	-0.05	-0.18	0.03	-0.08	0.05	-0.03	-0.07
1961	-0.14	-0.25	-0.16		0.01	-0.01	-0.02	-0.10	-0.08	-0.09	-0.06		-0.09
1962	0.06	-0.04	-0.15		0.07	0.10	0.07	0.01	-0.07	0.17	0.11		0.03
1963	0.15	0.10	0.04	-0.05	0.03	0.05	-0.03	-0.08	-0.05	-0.09	-0.02	-0.16	-0.01
1964		-0.01	0.07	0.08	0.01	0.10	0.08	0.06	0.04	0.05	0.15	0.17	0.07
1965	0.00	-0.09	0.11	0.04	-0.06	-0.01	0.03	-0.02	-0.06	0.08	0.01	-0.01	0.00
1966		0.02	0.13	0.09	0.02	0.09	0.10	0.06	0.17	0.19	0.20	0.11	0.11
1967	0.19	0.05	0.04	-0.14	-0.03	-0.04	-0.06	-0.09	-0.07	0.05	0.06	-0.04	-0.01
1968	-0.14	0.06	-0.01	0.04	0.09	-0.07	0.03	0.03	0.07	0.09	0.10	0.13	0.04
1969	0.20	-0.05	-0.04	-0.06	-0.07	-0.09	-0.15	-0.04	0.08	0.05	0.01	0.07	-0.01
1970	0.17	0.17	0.01	-0.12	-0.08	-0.12	0.00	-0.16		-0.12	-0.10	-0.23	-0.05
1971	-0.19	-0.03	0.08	-0.07	-0.17	-0.16	-0.15	-0.19	-0.13	-0.23	-0.01	-0.02	-0.11
1972	0.03	0.06	-0.01	-0.09	-0.02	-0.03	-0.04	-0.02	-0.06	-0.12	-0.04		-0.03
1973	0.00	-0.09	0.02	-0.03	-0.03	-0.02	0.03	0.02	0.01	0.05	0.13	-0.10	0.00
1974	-0.28	-0.09	-0.05	0.00	0.00	0.13	0.07	0.04	0.04	0.02	0.07		0.00
1975	-0.08	0.04			-0.22	-0.14	0.00	0.02	0.11	-0.15	0.00	0.06	-0.04
1976	0.07	-0.06	-0.10	0.08	-0.01	0.01	0.04	-0.07	-0.08	-0.04	0.30	0.18	0.03
1977	0.13	0.06	-0.02	0.01	0.09	0.04	0.00	-0.11	-0.10	-0.08	-0.04	-0.05	-0.01
1978	0.05	0.06		-0.05	0.08	0.04	-0.14		-0.01		-0.02		0.00
1979	0.15	0.10	0.24	0.21	0.14	0.21	0.09	0.09	0.13	0.21	0.17	0.07	0.15
1980	0.09		0.22	0.07	0.04	0.03	0.00	0.08	0.18				0.09
1981	0.11		0.07	0.07	0.02	-0.08	-0.03		-0.02	-0.06	0.13	0.19	0.04
1982	0.21	0.05	0.10	0.13	0.08	0.04	0.04		0.12	-0.11	-0.11		0.06
1983		-0.20		-0.10		-0.01	-0.01	-0.05	-0.03	-0.07	-0.10	-0.16	-0.08
1984	-0.09	-0.16		-0.10	-0.01	0.00	0.09	0.01	0.03	-0.05	-0.09	-0.15	-0.05
1985	-0.12	-0.07	-0.11	-0.15	0.00	-0.02	-0.05	-0.10	-0.05	-0.09	-0.11		-0.08
1986	0.07	-0.08	-0.16	-0.27	-0.26	-0.27	-0.25	-0.09	-0.01		-0.15		-0.15
1987	-0.10	-0.03		0.03	0.09	0.06	0.04	0.04	-0.04	0.05	0.09		0.02
1988				0.01	0.07	0.12	0.12	0.10	0.01	-0.02		-0.03	0.05
1989		-0.07		0.10	0.11	0.13	0.12	0.07	0.05	0.01	-0.05	-0.08	0.04
1990	0.06	0.04	-0.04	-0.04	-0.09	-0.02	-0.01	-0.02	-0.01	-0.09		-0.04	-0.02
1991		-0.37	-0.34	-0.02	0.00	-0.07	-0.09	-0.16	-0.19	-0.16	-0.14	-0.28	-0.17
1992	-0.33	-0.27	-0.17	-0.07	-0.15	-0.17	-0.13	-0.07	-0.16	-0.04	0.21	0.07	-0.11
1993	0.13	0.08	-0.06	-0.03	-0.03	0.03	-0.02	-0.02	-0.07	-0.11	-0.10	-0.02	-0.02
1994	-0.05	-0.16		-0.15	-0.15	-0.20	-0.17	0.02	-0.14	-0.02	0.01	-0.02	-0.09
1995		-0.01		0.01	-0.10	-0.08	-0.11	-0.07	-0.12	-0.04	0.01	-0.10	-0.06
1996	-0.10	-0.07	-0.08	-0.18	-0.16	-0.15	-0.16	-0.16	-0.17	-0.19	-0.21	-0.20	-0.15
1997	-0.07			-0.16	-0.07	-0.02	-0.08	-0.13	-0.04	0.03	-0.03	-0.08	-0.07
1998	0.12		-0.14	-0.06	-0.10	0.02	-0.08	-0.15	-0.05	0.02	0.05	0.02	-0.03
1999	0.01		0.06		0.03	-0.02	-0.10	-0.20	-0.20	-0.19	-0.05	-0.16	-0.08